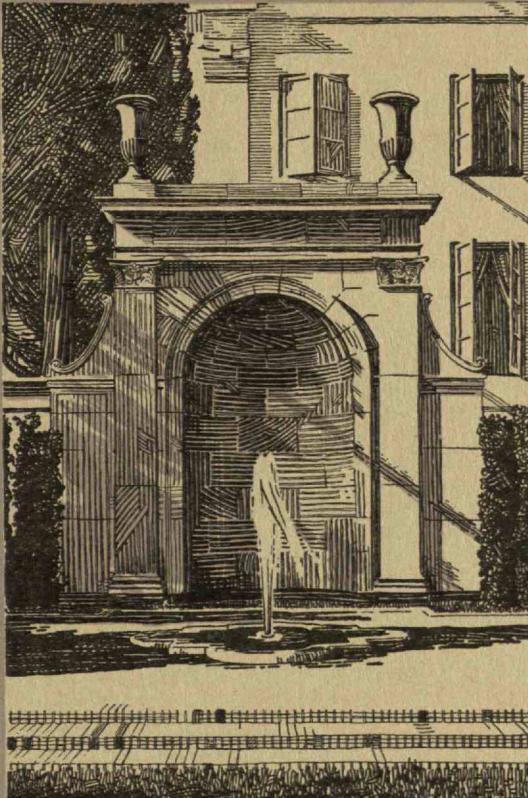


THE TECHNOLOGY REVIEW

RELATING TO THE MASSACHUSETTS
INSTITUTE OF TECHNOLOGY



MAY
1925

PUBLISHED BY THE ALUMNI ASSOCIATION

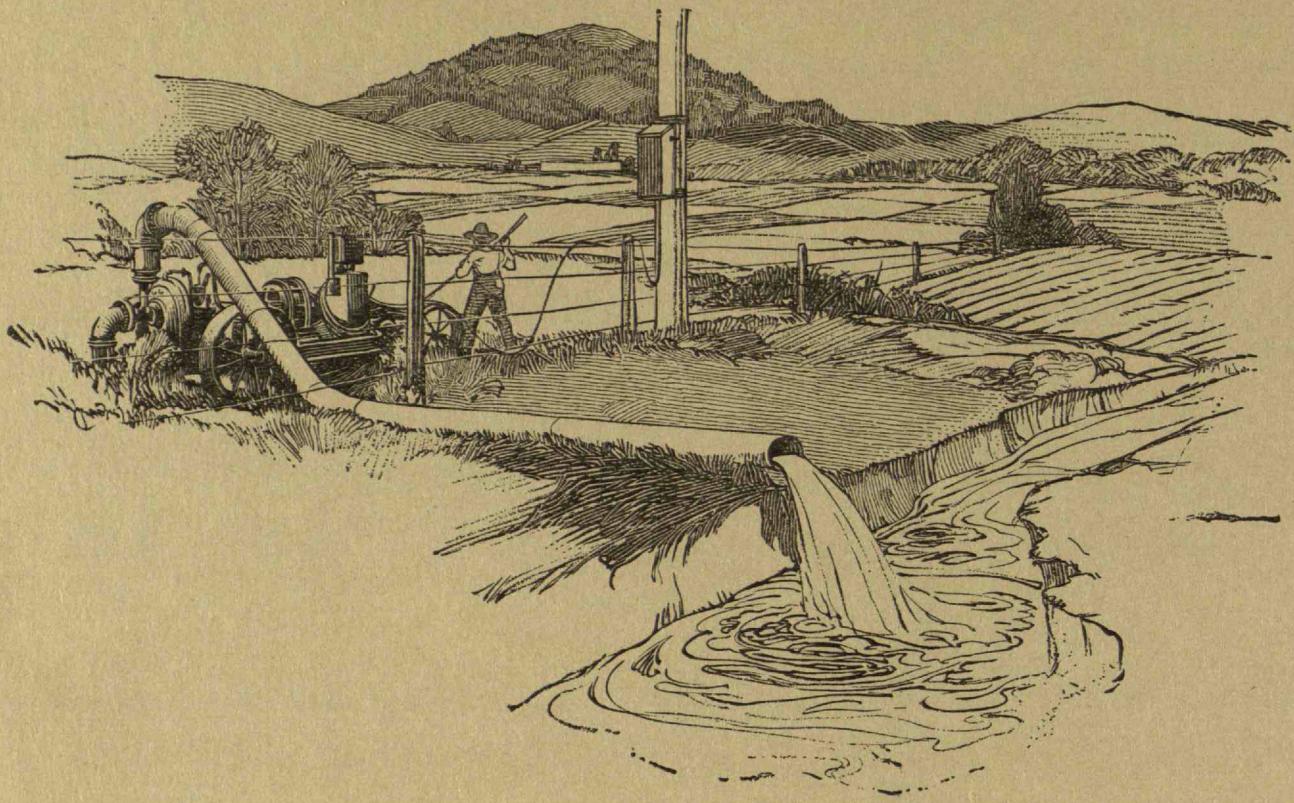
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INSTITUTE OF TECHNOLOGY

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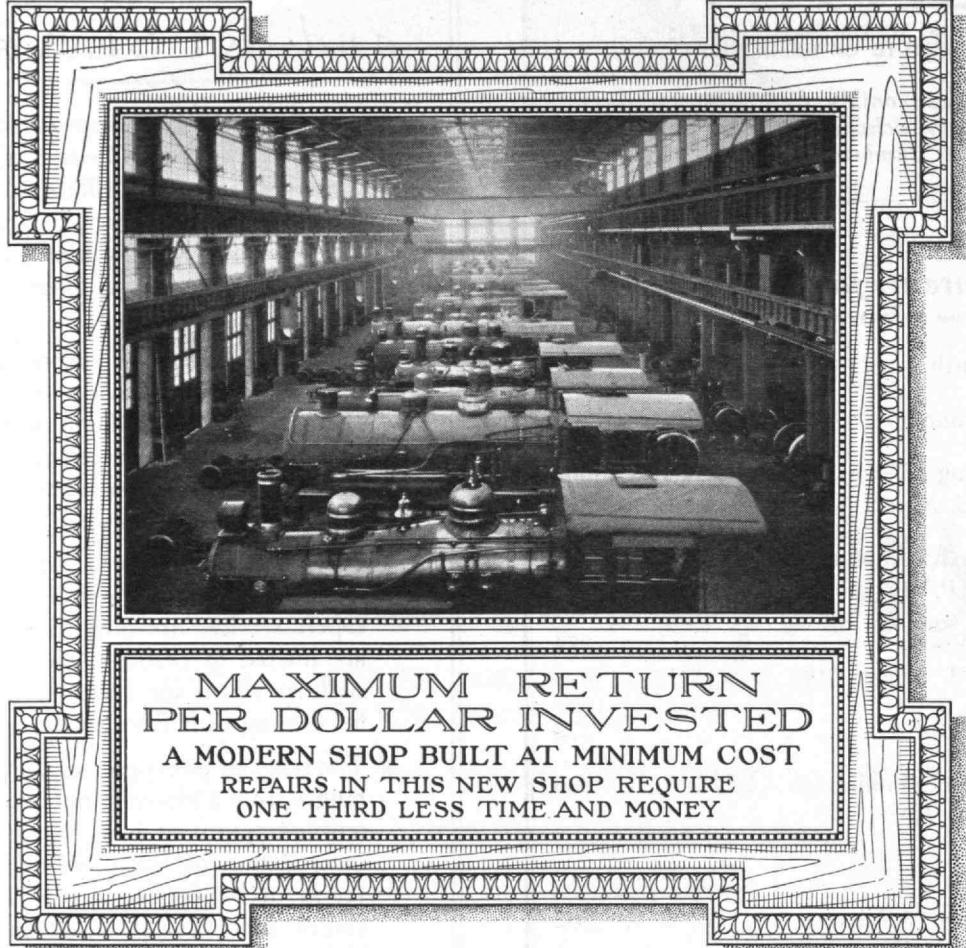
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The Past Month

VISITING Committees of the Corporation have sometimes visited and sometimes not, but under a new plan only recently evolved it seems likely that the functions of these committees will take on a new and important significance in the educational affairs of the Institute. The addition of a set of "Advisers" to the Visiting Committees of two Departments—Electrical Engineering and Naval Architecture and Marine Engineering—has already borne considerable fruit, (the latter having already suggested the establishment of a new course or option, for details of which see below), and the extension of the idea thus begun is contemplated as fast as an able and interested personnel may be found, and the application of the principle may seem appropriate.

"Advisers" to the Visiting Committees will be, in the mind of President Stratton, illustrious men in the industrial field most closely related to the Department in question. They may be already members of the Corporation or Alumni of the Institute—all the better if they are—but neither of these qualifications is a prerequisite to membership on the "Advisory Committee" formed from the combination of the Visiting Committee and its Advisers. One finds thus on the Advisory Committee to the Department of Electrical Engineering the names of Charles L. Edgar, President of the Boston Edison Electric Illuminating Company and J. E. Aldred, neither of whom is an Alumnus nor a Corporation member.

This latter Committee, with Gerard Swope, '95, President of the General Electric Company, Chairman

of the Visiting Committee, presiding, convened on April 8 at the office of the President for consultation with him and with several members of the Electrical Engineering staff. Other advisers, in addition to Messrs. Edgar and Aldred, were Frank B. Jewett, '03, Charles Neave, '90, Farley Osgood, '97 and Russell

Robb, '88. Elihu Thomson, non-resident Professor of Applied Electricity, was likewise in attendance. From 10:00 a.m. until late in the evening the Committee discussed the plans, problems and ideals of the Department, confining themselves not merely to a technical discussion of electrical engineering problems, but considering such diverse problems as the relation of instruction in physics, economics and English to the proper education of an electrical engineer. Study was given likewise to methods whereby individual students, particularly those of marked ability, could be developed with a minimum of restriction placed upon their own intellectual scope and ability.

The Committee on Naval Architecture and Marine Engineering, of which A. Farwell Bemis, '93, is Chairman, has in some senses progressed further than the Committee on Electrical



Notman

GROSVENOR D. W. MARCY, '05
Who, as Vice-Chairman of the General Reunion Committee,
is the man behind the gun that is being loaded
for the coming celebration

Engineering, in that it has already presented to President Stratton a full written report containing several recommendations for possible executive action. The Committee, with Prof. J. R. Jack, Head of the Department, participating, held a series of conferences in New York on December 17, 1924, with the executives of a number of shipping and marine organizations. Said the Committee at the outset of its report, viewing the

decrease of steel vessel tonnage built in this country from 3,300,000 in 1919, to 107,000 in 1924, "We have been led to the query as to whether we are making full and proper use of the fine equipment in professional teaching staff and physical plant to the full extent of our opportunities and obligations to the upbuilding and maintenance of our merchant marine. This has led to the query as to the fitness of graduates of the Department for practical service to the American ship-



SMOKE SCREEN

The Institute curtained from the Esplanade. See the story below

ping companies engaged in both coastwise and international merchant marine trade."

One of the most important suggestions made by the Committee was that a tripartite investigation be begun of the possibility of establishing at the Institute a course or option for training in the technique of the organization and conduct of shipping companies — the idea of the Committee being that if and when such a course were established, its arrangement would most profitably be coöperative; with practical work in shipyards or at sea dovetailed with theoretical work at the Institute.

THE recent visit to Boston on March 26, of Major-General Amos W. Fries, Chief of Chemical Warfare Service, U. S. A., was the occasion of a demonstration in Technology's front yard that will be remembered for a long time by everyone who witnessed it. While not entirely convincing as a military maneuver, aesthetically the gas curtain laid down by Lieutenant John T. Austin, flying a Martin bomber, was completely successful. Both banks of the river were lined with people at noon, the sun shone high and warm and scarcely a breeze was stirring as the big planes swept on from the airport in duck formation. They circled the basin once and then Austin let go. The smoke cloud hung suspended for a moment in heavy swirls of white, leaving deep shadowed recesses. Then it began to drift lazily down to the

water in long spirals. As the cloud sank it grew thinner so that the effect was much the same as that given by a graded wash rendering. The curtain was undeniably admirable as regards beauty. So far as military value was concerned, however, a mere layman could not feel convinced that behind this palpably thin screen planes could sweep up on Boston unobserved, bringing their loads of hell and death. There was no time when the other planes which were said to be simulating enemy ships could not be clearly seen except in the very first moment when behind the heavy bank their gaunt shadows hurtled across the white cloud.

During the afternoon, General Fries visited Technology to inspect the chemical laboratories and the work being done by the reserve officers' training corps. The country's only R. O. T. C. Chemical Warfare Unit is located at Technology. In the evening, General Fries was the principal speaker at a banquet in his honor given by the Boston section of the United States Chemical Warfare Association and the Northeastern section of the American Chemical Society in the Copley-Plaza Hotel. Robert T. Haslam, '11, Professor of Chemical Engineering at Technology, was in charge of the arrangements. Among the speakers were James F. Norris, Professor of Organic Chemistry at the Institute and President of the American Chemical Society, and Samuel H. Wilder, '91, Acting President of the Boston section of the United States Chemical Warfare Association. Throughout his stay General Fries was accompanied by Lieutenant Alden H. Waitt, '14, and Captain Thomas Phillips, both of the Chemical Warfare Service. Captain Phillips is Assistant Professor of Military Science and Tactics and in charge of the Chemical Warfare Unit at Technology.

STATISTICS recently released by the Registrar's office give rise to interesting conjectures. For several years now it has been the duty of The Review to record continuous drops in the total registration at the Institute. The figures for 1923-24 for the three terms were 2949—2811—2719 respectively. The corresponding figures for the present year 1924-25 are 2938—2826—2748. Thus it will be seen that while the beginning of the year indicated a continued drop in registration, the second term showed an increase over the same period last year for the first time in a long while. The interesting feature of this is that the third term shows a still greater increase over last year's figures. One of two conclusions may be drawn. Since the decreases from first term registration are due largely to scholastic difficulties on the part of individuals, it might be that the reason for second and third term increases over last year's figures is that the scholastic ability of the student body has improved. The more logical conclusion to draw is that Technology has turned the corner and that we may now expect to see still further increases. Either conclusion is a happy one.

AT a recent dinner given by the Engineering Foundation of which he is Vice-Chairman, the seventy-ninth birthday of Edward Dean Adams, '69, engineer, financier and philanthropist was celebrated as a national event. The roster of the dinner committee was a list of names to conjure with, including as it did, George F. Baker, Nicholas Murray Butler, Thomas A. Edison, Professor Michael Pupin, Newcomb Carlton, Robert A. Millikan and many others. During his full life, Mr. Adams has held more than 200 official positions and memberships. His affiliations are international. He has been closely connected with national electrical development and has been a director of numerous corporations including railroads, mining, power and a wide range of the industries. He is one of the grand old men of engineering and it is well that his services to the world should be thus recognized and applauded at so fit a time.

THE recent presentation of the John Fritz Gold Medal to John Frank Stevens, formerly Chief Engineer of the Panama Canal, has several features of interest to Technology Alumni although Mr. Stevens is not himself an Institute graduate. The Medal is the highest honor bestowed by the engineering profession in this country. Mr. Fritz has done great work for railroads, being the discoverer of the Marias Pass which is said to be the best railroad pass over the Rocky Mountains and the builder of the Cascade Tunnel of the Great Northern Railway. He was also head of the American Railway Mission to Russia in 1917-1918. He was President of the Interallied Technical Board, supervising the Siberian railways, when, if memory fails not, Henry J. Horn, '88, was Vice-President of the board. At the presentation John R. Freeman, '76, presided. Other holders of the medal include such men as Lord Kelvin, George Westinghouse, Alexander Graham Bell, Thomas Alva Edison, George W. Goethals, Guglielmo Marconi, Orville Wright, Elihu Thomson, former Acting-President of the Institute, and J. Waldo Smith, '86.

DOCTOR C. G. Abbot, '94, director of the Astrophysical Observatory of the Smithsonian Institution, has again furnished The Review with a news item of interest. His most recent exploit is that of estimating the diameter of ten of the brightest stars by separating their heat into a long spectrum and then calculating the probable temperature of each. In this work Dr. Abbot used a radiometer constructed by the late Dr. E. F. Nichols, former president of the Institute. Using the great telescope of the Mount Wilson Observatory, Dr. Abbot was able to obtain quite accurate measurements of heat far into the infra red. Beta Rigel was observed to have an estimated absolute temperature of 16,000 degrees Centigrade as compared with the sun's meagre 6,000. Sirius, the brightest

star in the heavens, was recorded at 11,000, Aldebaran, still going strong despite its frequent use by poets, recorded 3,000, Betelgeuse, 2,600 and Alpha Herculis, 2,500. The last two have an estimated diameter of 500 times that of the sun.

SPRING has come to the Institute and to the heart of Major Smith, its efficient Superintendent of Buildings and Power. All winter long a desultory battle has waged between the Major and *The Tech*, the undergraduate publication maintaining that the system of ventilation now in use in Eastman Hall failed to ventilate, and the Major proving by uncontrovertible statistics that the rooms of Technology were provided with super-ventilation of the most approved type. As the combat went on it became more acrimonious, a communicant of the student paper suggesting that the Major might attend a class to see how well his system was working, and the Major replying with some asperity that possibly the editors of the publication might do the same thing.

The warming zephyrs of the approaching summer



P. & A. Photo

CHARLES G. ABBOT, '94

The Director of the Smithsonian Institution's Astrophysical Observatory is still checking up on the sun which he caught napping a year ago

have, however, calmed the troubled seas and to-day there is no one at Technology that would not approve the newest devices which the Major has provided for the beautifying and improvement of the Institute.

The skating rink episode in the back yard has failed to daunt the Major. He still remains convinced that the rear lot is a place worthy of great improvement and to that end has provided a brand-new cement sidewalk leading from the back of Building Ten, diagonally toward Massachusetts Avenue. By performing this neat piece of construction (which is like the Pacific Great Eastern R.R. in that it gets tired and leaves its terminus unfixed) the Major has proved himself an active exponent of a larger building program for the further reaches of the Institute grounds. It can scarcely be expected that Technology will react any differently to the new improvement than does the average municipality. Therefore one may confidently predict that the hastening summer will witness the complete uprooting of the new walk for the purpose of constructing some magnificent shed.

Remark was made in The Review last fall about the new grass and hedges provided in the front yard. At that time the Major attempted to stop the inroads on his new turf of the foot of Attila by swinging ropes from walk to walk. With spring, the Major, has caused a number of natty blue signs, giving warnings to keep off the grass, to be placed on all the crucial corners. Perhaps these warnings might have received better heed had there been any observable grass to keep off of. At any rate they proved unsuccessful and at the very moment of this writing the Major's men can be seen constructing a still more stringent guard and one which promises to be effective. Graceful pipe rails are being driven into the ground at every corner, effectually transforming the grounds from a semblance of the deck of a storm-tossed destroyer to the general aspect of a freshly polished cafeteria at opening time. Only black glass sidewalks will be now required.

But all of the Major's activities have not been confined to the great out of doors. Within the confines of 10-250 he has been busy placing a new motion picture booth. With the aid of this new device it is expected that lectures in that room will be even more persuasive than they have in the past. More, painting of walls and ceilings has been revolutionized. The pliant slapping brush of the journeyman painter is relegated to the limbo where dwell the four-wheeler, the bustle, the course on War Arms, the "real estate agent" and (soon) the three-term calendar. A modern paintician, masked against noxious vapors like a charging infantryman, directs, now here, now there, the hissing nozzle of a spray machine. Thin and even goes the coat of creamy white lead. So marches science.

THE new Register of Former Students, dated 1925, made its appearance on March 30. It was eagerly hailed by those who had wearied of the necessity for

reference to the volume published in 1920, and which had been making for the past two years a relentless approach to the goal of complete uselessness as a compendium of up-to-date information.

The new Register fits the alumni body a bit tight at the waist. Fashion has changed; the Stylish Stout in directories, vogue in 1920, has given place to the new Straight Front. The 1925 Register, which must, one thinks, contain at least seven thousand more names than its predecessor, has somehow been compressed to a total of 423 pages, as compared with the 827 of the previous edition. This, although a feat comparable to engraving the Lord's Prayer on the head of a pin may, it is feared, give rise to the impression that plague has stricken at the Institute's Alumni and laid them low. But it is not plague: it is economy. The thinness of the volume should deceive no one as to the care, the thought, the trouble, the pain and the conscience that went into the making of it. It is a record as correct and as inclusive as could be humanly imagined, and great is the credit which it reflects upon Registrar J. C. MacKinnon, '13, its Editor, and Miss Julia Comstock, his executive lieutenant, in charge of the smooth-running Publication's Office in which the work was done.

Much less, however, is the credit which the volume reflects upon those who planned its physical appearance. Someone seems to have selected the telephone directory as a typographical ideal to follow, and then lost the way. The result is a specimen of the book-maker's art well calculated to make William Morris renounce his faith. The book is set in six point type, two columns to the page, with margins so scant at the trimmed edge that, at the binding edge, the eye can discern no space at all between the right-hand column of a left-hand page and the left-hand column of a right. Nowhere in the book are there any spaces or leads for relief of the myopic. Nor is there much expansive warmth in the style chosen for the imparting of the information so painstakingly gathered. Abbreviation's artful aid gives rise, for example to: "Grad. U.S.Nav. Acad.; XIII-A S.M.Lieut., Construction Corps, U.S.N., Navy Dept., Bureau of C. and R., Washington, D.C.," which, although inclusive, is not encouraging. The Register may not be an example of the best in printing but it has certainly given the micrographers something to think about. And even its displeasing appearance cannot detract from the genuine achievement of Mr. MacKinnon and Miss Comstock.

EVEN a book like the Register has its human interest. In the Alphabetical Register a long undisputed champion has been dethroned. In 1915 Joseph A. Aaron, '11, had the honor of being the Abou Ben Ahdem whose name lead all the rest. In 1920 he was still in his prime and sat the throne with easy grace. But in 1925 he has lost his honorary post irretrievably and is now led by Hart R. Aaron, '22, who sidled into first place

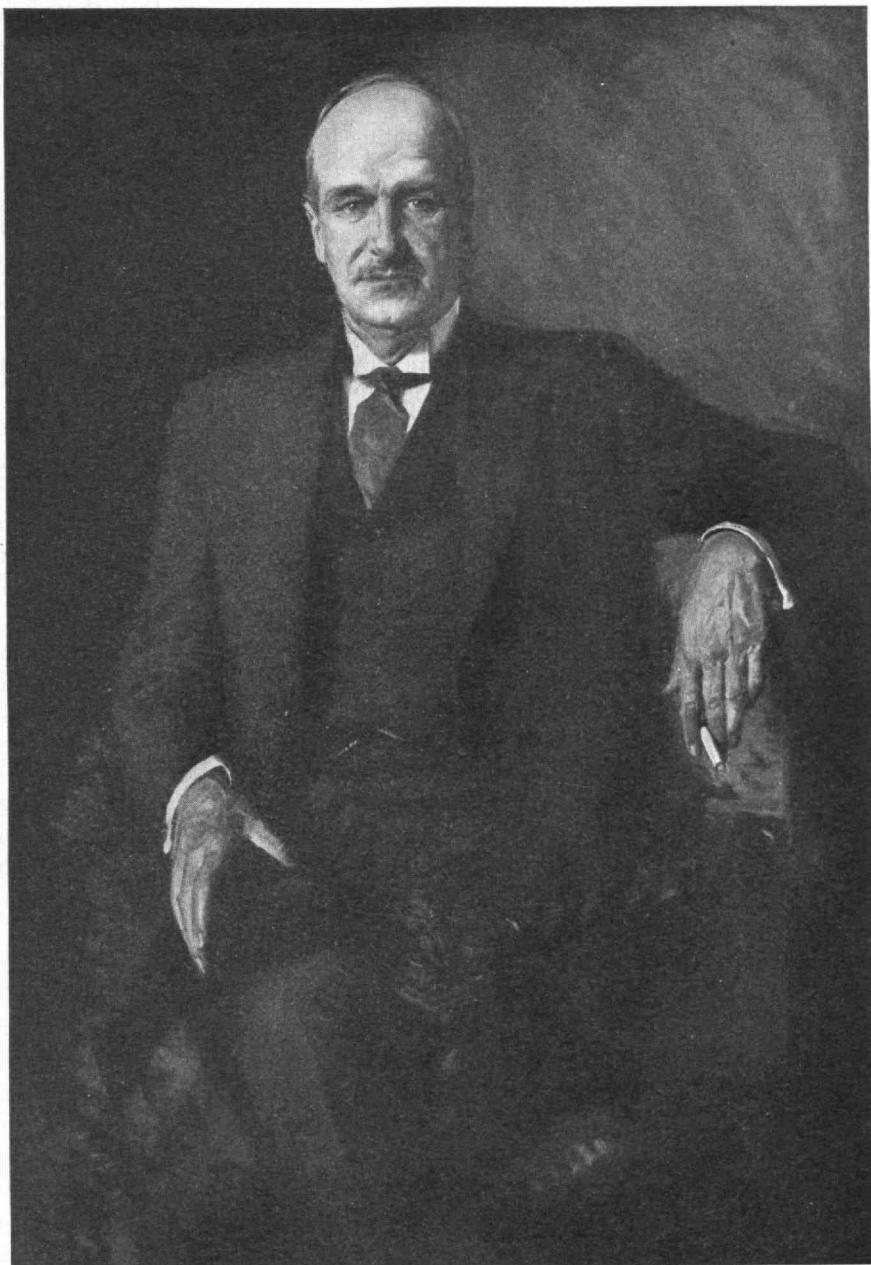
by two consonants and three vowels. The contest for last place has been keener. In 1915, Adolph Zuest, '07, brought up the rear, in 1920 he was ousted by Badrig B. Zulalian, '18, and only five years later, so keen has been the competition that Mr. Zulalian finds himself a bad fourth. The present leader of the end is Fred E. Zurvelle, '20. Apparently the present incumbent will hold his position for some time since the current student directory shows no one who even presses him, the last name being that of Guillermo Zuloaga, '28.

Until some student from Afghanistan sees fit to come to Technology it seems certain that the Geographical Register will continue to start off with the state whose name was made famous in the late Democratic ruction in New York. There is, however, considerable of an heroic struggle going on in Alabama for the honor of leading the delegation. In 1915 it was proud Birmingham which led the list with 26 members. In 1925 Birmingham's total has swelled to 37 but its crown has toppled and Anniston and Athens have placed themselves ahead of it, alphabetically. Anniston feels reasonably safe but it is understood that the Rotary and Kiwanis organizations of Andalusia, Afton, and Addison have started movements in their respective communities to occupy the first position.

At the nether pole in 1915 stood Montevideo, Uruguay, with two names. Her total has become nine, but she can no longer claim last place. The 1920 volume can scarce be counted, for a different arrangement of localities put at the end of the list the Society Islands which were by no means last alphabetically. The 1925 directory has returned to the strictly alphabetical listing and now one finds in last place, Ilya M. Georgevitch, '23, of Zaytcher, Yugoslavia. Unkind and jealous others point out that it is still possible to crowd him out by registering a student from Zanzibar, Zanzibar Island, but Registrar MacKinnon states that he is ready to stake his fame on the present arrangement regardless of that possibility and defies future editors to penetrate further without the somewhat questionable device of resorting to the Greek alphabet.

THE Power House stack was wreathed in steam from the two exhausts, and the whine of the alter-

nators reached to the bridge, for there was a party on, and, as always, Major Smith was supplying the kilowatts. Open House Night, begun three years ago as a passing whim of the Combined Professional Societies, reached a peak of triumph on April 16, when the Institute played host to a number of interested onlookers which, by reliable estimates, reached above 4000. The Institute, recently grown mindful of the wisdom of an aroused outside interest in its affairs, was quick in its accession to the excellent plans of the undergraduate entrepreneurs, threw its doors wide open, lighted every light in the Main Buildings so that from mid-bridge they looked like an illuminated crossword pattern (that was why the alternators whined) saw to it that every laboratory was well staffed for the



© Peter A. Juley & Sons

COLEMAN DU PONT

*One gleans a striking sensation of reality from this portrait,
painted by Howard Chandler Christy*

purposes of demonstration, and welcomed the horde of eager outsiders who thronged in at 69 Massachusetts Avenue. Dr. Stratton sat in the presidential chair, with the presidential door flung wide, and down the line, to the grubbiest laboratory assistant, the Institute attitude for the evening was cordial, open, explanatory. From 7:30 to 10:30 the crowds—high school boys and girls, bookkeepers, mechanics, business men, wives, mothers . . . even some Alumni, perhaps—surged through the corridors. Then, at 10:30 the Chemical Warfare Unit of the R. O. T. C. put on a demonstration of smells, flares, and bangs, and the crowds, having watched the last star-shell burst in mid-Charles and burn a momentary, yellow, jagged hole in the darkness, went home full of the wonders of science.

YOUNG Technology architects have shown in the late competition for the 1925 Le Brun Traveling Fellowship that their recent school training has stood them in good stead and has placed them in the first competitive rank. The award this year was made to Clarence W. Hunt of New York, who is not a Technology man. First mention, however, was given to Will Rice Amon, '23, while Louis Skidmore, '23, was also very much in the race with third mention. Thus of the four high competitors, Technology furnished two. The drawings will be on exhibition shortly at the Grand Central Palace, New York City.

FARLEY OSGOOD, '97, as President of the American Institute of Electrical Engineers made the announcement at the recent annual banquet of the Lynn Society of the Institute of Electrical Engineers that the Institute of Electrical Engineers was to make a strong effort in the near future to raise \$5,000,000 for the cause of electrical research in this country. The fund is to be administered along the lines practised by the Rockefeller Foundation. F. S. Dellenbaugh, Jr., '21, was toastmaster at the meeting.

STEPHEN F. SEARS, Instructor in English at the Institute since 1920, committed suicide on March 21 by flinging himself under the wheels of a subway train at the Essex Street station in Boston. Relatives, friends and the police assigned the cause of the act as ill-health. Mr. Sears had not been well for some time, and during the second term had been away from the Institute and Boston on leave of absence. He had made all arrangements, however, to return to the Institute on March 23, in preparation for the opening of the third term, and his Technology friends were prepared to welcome him back again when the noon-hour papers brought their shocking news.

Stephen Sears was a shy and quiet bachelor, Bostonian and Harvard graduate, and erstwhile teacher

of English in several colleges of New England and the far West. A remarkable unanimity of opinion placed him as a teacher of resource and ability, with many facts and many methods at his finger tips. No hint came to his associates that he was other than what he appeared: an apostle of quiet cheer, and self-contained optimism. It was an impression violently disproved by the tragedy of his death.

IN Baltimore, on the eighth anniversary of the entry of the United States into the World War, was begun the six-day sixty-ninth semi-annual convention of the American Chemical Society. Prof. James F. Norris of Technology presided as President of the Society and delivered one of three addresses of welcome, the others being by Governor Ritchie of Maryland and Mayor Jackson of the host city.

Rust and corrosion said to destroy annually some \$300,000,000 worth of metals was a chief topic of discussion. "Not direct oxidation by water or air nor colloidal reaction is now blamed, but electrical currents set up in metals by the chemical action of contiguous water, air or (especially) the two mixed. The currents disintegrate the metals, producing oxides and carbonates—iron rust, verdigris, tarnish, 'bronze disease.' Dr. Willis R. Whitney, [90] Director of the Research Laboratory of the General Electric Co., is accredited the founder of the electro-chemical theory of corrosion," says *Time*, for April 20.

Plans for the first meeting of the Executive Board of the United States Chemical Warfare Association to be held concurrently at Edgewood Arsenal were promulgated by Chairman Charles H. Herty. "One aim of the association will be to destroy the grotesque fear of New York being bombed by deadly germs," said an announcement. Salmon W. Wilder, '91, is a member of this Executive Board.

DR. F. L. BISHOP, '98, Dean of the School of Engineering at the University of Pittsburgh, will temporarily turn aside from the planning of a 52-story college to consider road problems south of Panama. He has just been chosen as one of six men, nationally known in the field of highway transportation, who will form the United States delegation to the Pan-American Road Congress at Buenos Aires next October. J. Walter Drake, Assistant Secretary of Commerce, is to be the seventh member and head of the party. A great impetus toward the construction of new highways in Latin-America is expected to result from the Congress, to which will come representatives from the organized Confederations of Highway Education of most of the South American countries. Washington officials regard the Congress as an initial step in an international movement to link the Americas closely together through the development of adequate systems of communication.

UNDER the will of E. D. Barbour, a Boston business man who died on March 5, the Institute is to receive an annual income of \$20,000 until the death of his daughter, after which it is to profit to an amount now computed to be roughly \$1,000,000. Harvard University and Radcliffe College receive similar bequests. The extent of Mr. Barbour's beneficence comes as a distinct and grateful surprise to the many of the Institute who had no reason to suspect his interest in its welfare. It is understood that the will is to be contested by a daughter to whom a previous instrument left the entire estate. It is therefore expected that litigation will make the funds unavailable for the present at least.

DURING his recent swing around the circuit, stirring up enthusiasm for the reunion, Orville B. Denison, '11, was the guest of honor on March 26 at a dinner given by the Cincinnati Alumni at the Business Men's Club. At that time the important discussion centered on the best method of selecting this year's representative to receive the newly created Richard Warren Proctor Scholarship. The scholarship, amounting to \$350, has been named in honor of the Late Richard Warren Proctor, '94, who was chairman of a committee to formulate plans for such a scholarship shortly before his death in December, 1924. It is now in the hands of a committee of six Alumni with Charles G. Merrill, '88, chairman. Only one scholarship is contemplated for the present but the Cincinnati Alumni hope eventually to be able to maintain four scholarships in order that there may be a holder of one in every class of the Institute.

ONCE again lack of space precludes anything more than passing mention of the numerous speeches of Technology interest during the past month. Here then stands the record: March 15—A. E. Kennelly, Professor of Electrical Communication, gave a Society of Arts Lectures in Room 10-250. Subject, "Radio and Its Underlying Physical Principles."

March 24—W. J. Drisko, '95, Professor of Physics, spoke to the convention of optometrists of New England on "Illumination and Vision."

April 2—Alexander Brin, editor and publisher, spoke to the Jewish students of Technology in Walker Memorial. Subject, "The Jewish Heritage."

April 3—Dr. Franz Fischer, Director of the Kaiser Wilhelm Institute for Coal Research in Mulheim-Ruhr and Editor of *Brennstoff Chemie* spoke in English to students on "Liquid Fuels from Water Gas."

We remind our readers that the publication of The Review is, according to schedule, omitted in June. This May issue of the magazine is Number 7 of Volume XXVII. Number 8, the last of the Volume, will accordingly follow bearing the date of July. In order that this issue may cover to the fullest detail the important features of the coming All-Technology Reunion in June, the issue will not be placed in the mails until July 10.

April 3—M. C. Brush, '01, President of the American International Corporation, gave an Aldred lecture in Room 10-250.

April 6—Dr. W. P. Davey of the General Electric Company, Schenectady, New York, spoke under the auspices of the Departments of Physics and Electrical Engineering. Subject "The Application of Crystal Structure Study to Physics and Chemistry."

April 7—The same speaker. Subject, "The Theory of Solid Solutions and the Theory of Ductility."

THAT the Institute is in high regard for other reasons than its technical standards is manifested by an unusual obligation placed upon its President under the terms of the will of the recently deceased Helen F. Kimball of Brookline. The document provides for a bequest of \$100,000 to establish a fund to be known as the Moses Kimball Fund for the Promotion of Good Citizenship. The fund is to be administered by three trustees. One is to be a descendant of the father of the deceased so long as that is possible and the other two are to be nominated by the Presidents of Harvard and the Institute.

Editorial Comment

Three Objectives

In theory, the Bursar of the Institute is the agent of the Treasurer; a business man, resident at the Institute for the sake of convenience, whose duties do not go beyond the chill limits of finance. If his books are in order, his funds well invested, he need have no further concern. The spirit of the institution need not penetrate him. It's a business proposition. That's the theory.

In theory also, the Alumni of the Institute, being its ultimate product, are one with Alma Mater; they are flesh of her flesh, bone of her bone. Day and night, theirs is a vigilance that never sleeps in a guardianship of her prestige, her honor. You have read all about that before, and you know it for good theory.

One of these theories never works, and the other works, but not always well, since a vigilance that never sleeps gets a bit tiring after ten o'clock. The theory of the function of the Bursar is a rank failure by reason of the man in office, who in his twelve years at the Institute has steeped himself so deep in its customs and made himself so learned in its traditions that he, who never spent an undergraduate day here,

is a much better Technology Alumnus than most of us four-year chaps will be to the end of our lives. Step out, please, Mr. Ford, and receive the decoration.

The latest illustration of this is of quite recent date. For the last few years the Alumni Association has been so busy with its By-laws and other details of its own organization that it has been inclined to lose sight of the objectives for which the organization was set up, and to which the organization should be, of right, completely subordinate. Council meetings are for purposes other than a report of dues received, and Alumni should be charged to remember that reunions are admirable if taken as means, and absurd if used as ends.

If we were to pause long enough to ask ourselves what, since the raising of the Endowment Fund, is a major accomplishment directly to the credit of the Alumni Association, the pause might be long enough to prove embarrassing. We are far from suggesting that individual Alumni and some classes, like '93, have not done splendid things in the past five years. We are, however, not merely suggesting but asserting that the Alumni as a group, through its executive arm, the Council, has made no important contribution to the Institute in the past five years.

At this point, enter Mr. Ford, who, having observed this lethargy, earned the plaudits of the multitude by standing up and saying to the Council, with a nice blend of tact and vigor, that it had been stewing long enough in its own juice. The observation would have been apt long before Mr. Ford made it, and now that it has been made, the time seems highly appropriate to take action on it.

The Bursar is not a destructive critic, and, having told the Alumni Council that it lacked those objectives that make life interesting and worth while, he proceeded, before he could be questioned, to supply them — three of them — all excellent and all meriting attention at an early moment. They are simple and obvious, but they are also neglected and pressing. Here they are: one, a memorial to President Rogers; two, a memorial to the great Establisher, Richard C. Maclaurin; three, a provision for adequate student recreational facilities on the "New Land."

It is perhaps the greatest virtue of these objectives that they need no argument. Never was there a proposition so obvious as that the Founder of the Institute, to whom we pay such incessant lip service, and to the memory of whom we have dedicated on the present site, never so much as a brass plate or a stone block, has owing to him a memorial within our power to give before any more student generations go on in ignorance of his very face and name. Nor can it be suggested that a memorial to President Maclaurin will be more fitting in ten years than it is now, more than half a decade after his death. Here at least the Council has made a start: somewhere in the dim past it appointed a committee to consider the question of a fitting me-

morial. Unfortunately, notwithstanding the excellence of its personnel, this committee seems to have done little since its creation save ask, in its annual report, for suggestions from the Council. These having not within memory been forthcoming, the matter has rested there. Now, happily, comes Mr. Ford, with the idea of "Maclaurin Hall" — a memorial to the man who gave his life for the New Technology, that shall take the form of an auditorium large enough to serve the purposes of any general convocation. It is sound logic to suggest that a life so intensely useful as was Dr. Maclaurin's can best be memorialized by something utilitarian, and certainly Technology could put to the most appropriate uses such a hall — the lack of which has so seriously embarrassed it in the past, and which will embarrass it again, no further in the future than June, when the Institute will find itself in the midst of a combined graduation and reunion with no auditorium large enough for a general meeting place. The ground between Building Two and Walker Memorial supplies an admirable site: all that is needed is the determination that some day it will be put to the worthy purpose Mr. Ford suggests.

The third objective — the creation of adequate recreational facilities on the new land — is not one to be tossed off with a phrase. Here, perhaps, the Alumni might well wait (not that they need to be urged) until Messrs. Carlu and Carlson advance with the general plans for development which the Corporation has charged them to prepare. No harm would come, however, from a discussion of what might some day be done with the existing Walker Memorial, when its gymnasium is definitely relinquished in favor of one on the new land which would make some approach to adequacy, and when the pressure of increasing student population makes some of its present inconveniences no longer bearable.

It is not here to be suggested that the time is now ripe for immediate action toward any of these three goals. It is, however, quite definitely suggested that a discussion of them could most properly begin at once: could better, in fact, have begun before. If the Council is an index, the Alumni in general have been suffering somewhat for interesting topics of conversation. Here are three — all interesting, all vital, all full of possibilities for much good to Technology.

With much appropriateness, the Five Year All-Technology Reunion comes this year in June, and by all accounts it will be a happy time. We do express the hope, however, that mingled with the dinners, the Pops, the outings, there will be a few moments of seriousness in which it will come to our blissful Alumni that they exist for purposes beyond organized class cheers. And if, by any chance, this Reunion ends without some consideration for the three objectives here repeated, it cannot be said to have been, despite all Jamboree Dinners, all Zizziter Demonstrations, a completely worthy affair.

Radio's Coming of Age

A significant experiment in broadcast education, told of by a pioneer

In the last act of Peter Pan, you will remember, Mr. Darling is brought home in the kennel, in which, since through his negligence his children had flown away, he has been living and going to his work. The homecoming is greeted by cheers from the street, which pleases greatly the vain Mr. Darling until Liza the little maid exclaims with contempt, "Lot of little boys!" And Mr. Darling replies with dignity, "Today there were several adults."

So might those interested in radio broadcasting reply to their critics. The audience seems to be growing up. Leaving out of consideration the pure fans who spend laborious nights in getting DX for the pure thrill of it, re-

By ROBERT E. ROGERS
Associate Professor of English

cent pronouncements seem to show, for instance, that jazz is nowhere near so popular as it was and is giving ground to 'classical music.' True, classical music runs all the gamut from Beethoven and Tschaikowsky to Ethelbert Nevin, but the word is not without significance. In another field, there is no more popular feature than Dr. Cadman's Sunday afternoon addresses from Brooklyn; good, vigorous hard-hitting stuff. And last, and most significant, note the flood of educational features on the air, not merely isolated lectures but whole courses, often with textbooks, syllabi, written papers and examinations, and certificates of credit.

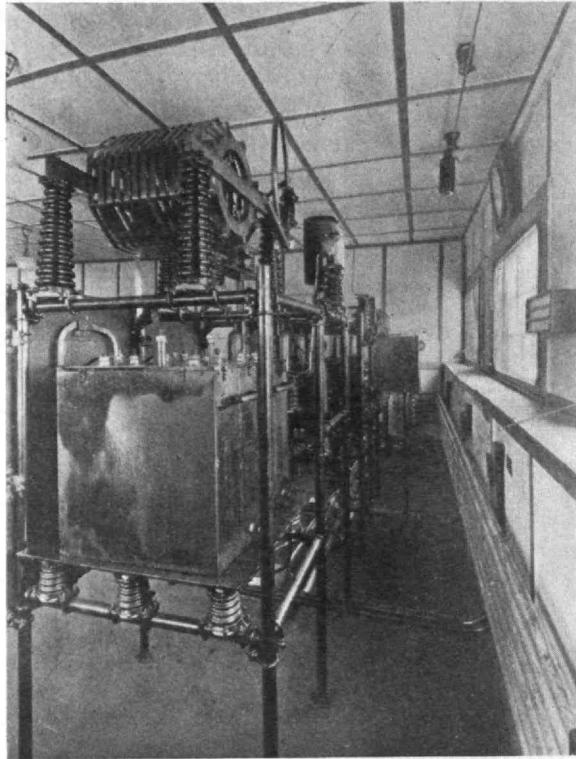
It is this last evidence



LECTURER AND LECTURE HALL

Professor Rogers and the Temple of the Mike, into which he delivers, once a week, a University Extension Course in contemporary literature

of the growing adulthood (or adultery or adulteration, take your choice) of the radio audience that I am writing about. You won't mind if I get rather personal and use the capital *I* a good deal, for I am speaking entirely from my own experience as radio lecturer on literature these past months under the auspices of the State of Massachusetts Division of University Extension, by arrangement with the Boston Herald-



THE REGISTRAR'S OFFICE OF THE FUTURE
One registers for a course in the Radio University by tuning into consonance with this—the main transmitter of Station WBZ, in Springfield

Traveler and the Hotel Brunswick studio (WBZ) of the Westinghouse Electric Company. To think of it taking three organizations of that calibre, three hearts beating with but a single thought, to get Me and my ideas to the waiting millions on the air!

The Massachusetts University Extension organization claims to be the first in the United States to conceive in a practical way the idea of extending the work by radio. James A. Moyer, director, and his lieutenants, Charles W. Hobbs and Dennis A. Dooley, form a trio whose power of looking ahead, of planning and organization, has made Massachusetts department one of the largest and liveliest in the United States, with a record of some two hundred thousand enrollments in their various extension courses since 1916. Mr. Moyer, himself an authority on radio communication, and Mr. Dooley, the enthusiastic and indefatigable organizer of instruction, conceived the idea nearly three years ago, before any of the present educational organizations now on the air had made a start. Mr. Dooley believes that it was his ideas expressed to some of the Columbia University people that led that university to steal a march on him with a course on Browning, the theory being that if the radio fans could stand Browning they could stand anything. Since then, of course, Columbia, New York University, Iowa State, Tufts and other colleges have done interesting work.

But the first attempt at radio instruction by any state educational department, Mr. Dooley believes, came in the fall of 1923, when the division made arrangements through Mr. G. H. Jaspert, director of WBZ, to broadcast educational features, using the publicity power of the *Boston Herald-Traveler* and the hundreds of newspapers associated with it to sell the plan to the public. The first attempts had to be made through the Springfield studio, as the Hotel Brunswick studio in Boston was not then in existence. On September 20, 1923, Mr. Dooley spoke from Springfield, outlining the scheme and asking for his listeners' reactions. From the letters that came in suggesting courses, it was decided to offer three; one in Household Management given by the Supervisor of Home Economics in Springfield, Agnes H. Craig; one on Radio Reception for Amateurs, given by Edwin R. Goodrich, of the Springfield Technical High School; and one on Appreciation of Music, with illustrations, by Robert E. Olmstead, professor of Music at Smith College. The total enrollment in these three courses was 146 and the experiment was deemed a sufficient success to continue in the fall.

The striking, not to say unique, feature, of these courses was that perhaps for the first time in the brief but crowded history of radio broadcasting, the listeners were given an opportunity to pay for their entertainment and instruction. This proposal was apparently regarded with some skepticism by the radio people, dealing with a public used to free entertainment, but the past experience of the University Extension promoters had convinced them that people were ready and willing to pay for education. Those first 146 enrollments, therefore, represent 146 bona-fide payments of one dollar each, in return for which the students received printed outlines and study material for the courses and a "radio certificate" attesting that they had completed the course.

The real test of the experiment, however, came last fall . . . and there is where I come into the picture. For the past two or three years I had been giving courses on modern literature for the University Extension, both for library workers and, in the evening, for the general public, to audiences of from three to four hundred people. Prof. André Morize, teacher of French at Harvard, who had been having an astonishing success teaching French by the lecture method to large groups, and Prof. Stuart Mason of the New England Conservatory of Music, well known musician and teacher, were also invited. Three courses of eight lectures each were offered; Conversational French, Appreciation of Music, and Contemporary American Literature.

The enrollment records tell the story. There were 230 paid enrollments in the music course; 293 in the French course; and 632 in the Contemporary American Literature. Later in the winter two new courses were offered, this time from the Springfield studio; a course on Short Story Writers by Dr. J. J. Reilly, superintendent of schools of Ware, Mass., with an enrollment of 214, and another music course by Prof. R. D. Welch of Smith College, with 151. This spring, from Boston, Professor Morize is giving another French course and I a series on English writers, with a somewhat smaller enrollment, and the outstanding success is a course on Business Psychology by Prof. Glenn W. Merry, formerly of the University of Iowa, with an enrollment of 471.

This year's total paid enrollment for radio instruction through station WBZ by the University Extension division of the Massachusetts State Department of Education, amounts to 2,349. Counting in last year's enrollments the total is within five of 2,500.

I do not know how the other courses were conducted, but in my own case I had sent out from the State House a twenty-page pamphlet of lecture notes and bibliography, and at the end of the course asked those who wished the "radio certificates" to write me a 1500 word original paper on some specific subject suggested by the course. There came in to me about 75 papers as interesting as you could care to read, from all over the eastern part of the United States, men and women, high school children and grandmothers with literary memories of fifty years or so, school teachers and librarians, and busy wives and mothers. I want to speak of some of these later. Of these seventy-five I read the three most interesting over the radio on the evening of March 2, as well as an honor roll of names and addresses of ten other writers.

The geographical range of the enrollments is interesting. Most of them come, naturally from Massachusetts, about 351, with the reception apparently more successful outside greater Boston than in the immediate vicinity of the station. Connecticut has 99, New York State 95, Pennsylvania 95, Maine 60, New Hampshire 49, Ohio 43, etc. Canada sends 30 enrollments. The rest are scattered in scores and dozens and threes and fours over every state in the United States east of the Mississippi, and some as far west as Montana: all of the eastern provinces of Canada, as well as Labrador and Newfoundland; and three letters indicating reception from the midland counties of England.

According to letters received at the Studio, at the State House and at my office (for radio fans write indiscriminately where they please), there have been organized study groups and round table discussions in many a town, and in Maryland the teaching sisters of a Catholic Convent and their pupils apparently took the course en masse. In Lowell, recently, a group of club women after hearing Louis K. Anspacher, the distinguished dramatist, talk on Bernard Shaw in the afternoon, gathered round the loud speaker to hear me talk on Bernard Shaw that evening — apparently to see if they had got their money's worth in the afternoon. Fortunately for Anspacher, however, that was the night a wire grounded between Worcester and Springfield and nothing happened. So we're both safe.

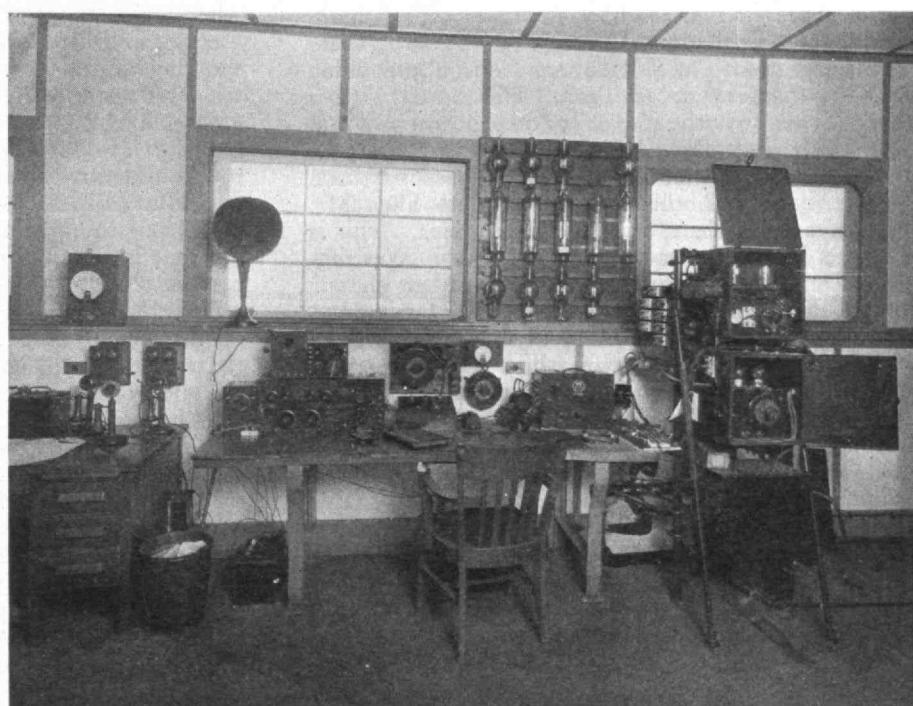
That is about all the statistics on the subject I can think of. But, in the words of the lamented Margie, "That's not the half of it, dearie!" To me the personal, unofficial part is the most interesting.

There are two universal and never failing questions concerning broadcasting. Everybody asks you, "Doesn't it feel funny to talk without seeing

your audience?" And you ask everybody, "How was your reception last night, or last week? Did it fade?" The answer to the second question is almost always "Well, not so good, but it was fine last week" and presumably it will be fine next week. Apparently it always is fine except on the particular nights when you broadcast. Jam yesterday and jam tomorrow but never jam today! Lewis Carroll was a wise guy.

The first question can't be answered in a jiffy. It is rather a funny sensation at first, but it wears off. Apparently the first time is terrifying to everybody. I have heard, in the Brunswick studio, some young girl singer, with a pretty enough voice, who, facing the microphone for the first time, sang for full five minutes with constricted throat and wobbly tones, breaking dreadfully on her high notes, forcing her voice as she never would before a flesh and blood audience. And I remembering "Roxy" saying somewhere that he once saw John Barrymore in the throes of ghastly stage fright before the Mike. Sounds probable!

You shoot up in the Brunswick elevator to the fifth floor, climb the little stairs to the roof and find yourself in a small reception room, where are a few comfortable chairs, two hatracks, a water-cooler, and on one wall a contraption that looks like a period Victrola, which is, at the hour when I hear it, about 7:10 p.m., either emitting a bed-time story about Old Granny Fox and the baby possums in a lady's soothing voice, or else, a long and complicated market report in a rapid professional monotone. "Onions seem stronger" as the voice remarked on one occasion. The voices are coming from Springfield, by wire not radio, for the two studios interlock in their programs . . . which is one reason why every bit of the program has to be carried out as scheduled to the minute. There is also a friendly young lady, Miss Lawless, the hostess, who is there to receive visitors and welcome the entertainers, particularly the women. There is a swinging door into the next room, which is a real mystery of science. Whenever it opens the voice from Springfield is cut short;



THE DEAN'S OFFICE OF THE FUTURE
Discipline in the Radio University is administered from the Control Room of WBZ

when it swings closed the voice shoots out with sudden emphasis and scares you. I have seen women, just leaving the reception room, hit in the back by that voice and propelled by it down the stairs as if shot out of a gun.

You pass through the door into the large studio. At the right as you enter is the small closed room, partly visible through a small glass window, in which are to be seen two men in short sleeves, attentive and busy, surrounded by tubes and coils and wires and semaphores and gadgets and widgets and all the technical paraphernalia. The studio is large, windowless, hung entirely with gray flannel, walls and ceiling like a tent. The flannel is to deaden echoes, apparently, but it is decorative and tones in with the coverings of the large comfortable couches and chairs scattered about. There is a little desk in one corner for the announcers, a large grand piano under the rosy light of tall piano lamps, and towards the end of the room, standing in solitary glory, the be-all and the end-all of the whole works . . . the Mike. On a tall metal stand with double arms are hanging two of them, the mouthpieces screened with rosy silk the color of the piano lamps. They hang at the height of a man of average stature. I, for instance, could not get my mouth on a level even by standing on tiptoes, and I worried accordingly, until I was told not to bother.

I wanted to sit down at the desk and talk, as I am used in my classes, but after one trial they discouraged me. You have to be careful how you talk to Mike. If you sit down and lean over, you contract the chest and lungs and Mike doesn't get the full voice. If you stand too far off, he fades on you. If you stand too close and talk directly into him, you blast, which is almost as bad as static or code or squealing. Apparently the only thing which doesn't affect Mike is halitosis. So the best thing to do, apparently, is to stand close, look and talk straight ahead of you, no matter whether Mike towers over you or not, but (this is important) *obliquely* past the receiver.

There is a fair-haired young man waiting to receive you. You are glad to see him, for he is a Tech man, too, Mr. John D. Kuhns, Course IV, Option 2, Class of 1927, a graduate of Wittenberg College and doing very well, thank you, at Tech. He shares with a couple of other boys the rôle of announcer and program manager at the studio. As the clock ticks to 7:29 he nods to the man watching inside the glass partition and presently a red bulb lights on Mike. Then Mr. Kuhns remarks in clear, slow and even tones, "This is WBZ, the Hotel Brunswick studio of the Westinghouse Electric Company. The next number on our evening's program is a lecture in the University Extension course . . . etc. . . . etc. . . . Professor Rogers." He steps aside, you slide into place, left oblique into Mike, clear your throat frantically and remark in weak but cheerful tones, "Good evening." You'd like to say "Hello everybody," but that's copyrighted. And then for thirty minutes you talk for dear life, in an empty, silent room, to an unresponsive piece of mechanism, wondering subconsciously how it's going, whether it's fading, if you are speaking too fast, and if Mother and Father are getting it out in Cambridge.

That, I think, is what makes you nervous. When you are facing a class or an audience you can see them, you know they can't get away on you, you can tell when they yawn and talk and go to sleep and protest to themselves. Then you can act accordingly. Jazz

it up or shut it up, as the case demands. But over the radio there is an insistent, helpless feeling. "Maybe you're not holding them, maybe you're fading on them, maybe at this moment hundreds of them are hunting for WNAC or New York or Schenectady or God knows where. Maybe your eloquent remarks on H. G. Wells are getting all mixed up with a Chicago market report. (That happened once. A man wrote me that he got Eugene O'Neill and the price of pork all confused.) Not only that, but you know that you have only thirty minutes flat for a lecture that at Technology you dally with for three one-hour installments, and that already outside the door in the reception room are waiting, champing at the bit, the Dorchester Ladies' Flute and Saxophone Quintet, to say nothing of Lottie the Child Dialect Interpreter. These are the things that haunt you subconsciously and make you go twice as fast as you should and trip up in your sentences . . . that is, unless you are reading from manuscript. But don't read from manuscript. Never read from manuscript over the radio! It sounds dead enough, anyway. On the air it sounds not only dead but buried and in process of decomposition.

The only thing necessary to add to your pleasure is to have a roomful of visitors sitting round the wall in strained silence. I mean strange visitors, not the dear, habitual ladies who live at the Brunswick and are faithful attendants. For presently the strangers will hiss reproachfully at each other "you *said* it was music," and get up and go out, and each time one of them opens the door into the reception room you will hear your own voice amplified some hundred times coming from Springfield, and about three words ahead of you and sounding unbelievably ghastly.

And you stop on the stroke of eight, for fear they will cut you off in your prime. Mr. Kuhns steps into place and remarks "You have been listening . . . stand by a minute . . . the next number" . . . and you grab your hat and race up the street to try to beat the curtain at the Colonial, thus combining business with pleasure and making two evenings grow where only one grew before. Or, sometimes, you hang around, and listen to the other entertainers, or to that sporting editor doing his marvelous (if you've ever tried it) stunt of following a fast professional hockey game play by play, until towards the end of the evening the hostess serves refreshments and you all sit round and eat, the entertainers and the technical staff and Miss Lawless and Mr. Kuhns, and talk radio, and learn something of the new and pleasant professional life that is growing up behind the scenes of the broadcasting world.

Within a few days after your first lecture the letters begin to come in . . . and then you begin to realize that you are up against something you hadn't even dreamed of. I doubt if anybody in my position, one who has taught for a dozen years in a university of the first rank, to picked students each one of whom represents a hundred discards in our school system, students living in a metropolis, with schools and books and lectures and plays and art and music handed to them on a silver platter, (while they go to the movies) . . . I doubt if any one in my position can realize what the radio can mean, properly used, in this country. I didn't until, with very distinct skepticism, I tried it.

The first two letters were amusing and dismaying. I had given my first lecture the night before President Coolidge was elected, the night he was due to deliver his last campaign speech, and naturally I wondered

who was interested in American literature when American history was being made. But the first letters made no reference to that. Theirs was another song. "WBZ didn't have power enough behind you last night. Couldn't keep the price of hogs from KDKA out of your lecture. However, I got ninety per cent of it." This from Little Current, Ontario.

This was a bit discouraging as a starter but there was light ahead. Mail began to dribble in, letters and post cards (the radio fan is a fiend for correspondence) and from week to week the State House would send me pages of "flimsy" with extracts from the dozens of letters received there. Occasionally it was an old school friend of years gone by, often some Tech man off in the wilds of Canada or Maine or New York State, who had heard me by accident and recognized the voice.

"And suddenly I said to myself, By God there's Tubby Rogers standing with his back against the blackboard!" That was after I had read Vachel Lindsay's *The Congo*. There was one from a Tech boy in Maine wishing he had taken more General Studies (Architectural Bulletin please copy!). There was one from a 1917 man who had heard me on this same general theme at the New York Technology Club dinner and who wrote to say that his wife on a visit in Canada had reported reception from there. And when I awarded first place for the best essay sent in at the end of the American Literature course, it was won by a woman in Syracuse, N. Y., who turned out to be the wife of Bates Torrey, Jr., '12. He shared in the glory for he had advised which essay to send in, and he opined, I learned later, that the English department at the Institute must be a different kind of place from what it was when he was an undergraduate. As Mr. Torrey left the school just as I entered it, that rather tickled me.

I prized my Technology letters over all the rest, but there's many another of interest. The convent of nuns in Maryland, of which I spoke, who took the course en masse, wrote asking some very interesting questions about literature. There was a man in New York who asked me to settle an argument he had with his wife anent a certain rash and explosive statement I had made about an all too popular magazine. There was, but the other day, from Canada, a most kind letter from the cousin of one of the most distinguished living English men of letters, making certain corrections of statements of fact I had made, about which I was very glad to have the truth.

But there is another kind of letter which means a good deal to me. I am going to quote a few sentences to show what I mean.

"This town is forty miles from a public library but I am going to try so hard to get the books you suggest." Massachusetts.

"I am a mother with three children aged six months, three years and four years old. I would like very much to take the course." Elkhorn, Wisconsin.

Occasionally, by the way, they object to the 7:30 hour, for it comes just between the bed-time story hour and bed-time. But again—

"I can't tell you what these courses mean to busy people like myself. William and Mary College conducts extension courses in our city, but I cannot go out at night, as I have a small child. The radio study has two advantages: I can do it in my home and work as I listen."

"As I was obliged to leave college without graduat-

ing, I am particularly happy to be able to commence my new year by taking up this radio course." Watkins, New York.

"This course is of estimable value to students living in villages far removed from those things which make life worth while to them, and to me, literally starving for such, it is a God-sent message." Americus, Georgia.

"This is my first opportunity to attend college lectures anywhere, much less in historic Boston. I feel like saying Thank God for radio!" Statesville, North Carolina.

And again and again and again, "What a relief after jazz!"

But finest of all was a four-page typed letter from a farm out on a R. F. D. route in Ohio, a letter which was a real Iliad of the fight of an American family not merely to exist but to keep alive mentally. I wish I could quote it all, but a word must suffice:

"Until Cousin Frank brought us our radio we had not heard a lecture for twelve years, nor a good play since the first few months of our marriage when we went to Chicago and saw *The Garden of Allah* and Maude Adams and Sothern and Marlowe . . . Now we have orchestras and organ recitals every evening. . . I want to enroll in the course and I hope I can complete it. It is such a fine generous offer for folks like me who simply can't get away from home."

Letters like that make you feel happy! I will admit that I went into this thing completely skeptical. I classed study by radio with Thomas A. Edison's prophecy that all education in the future was going to be by moving pictures. I have changed my mind. It is quite evident that there is an enormous public — how enormous we can have no idea — that formal education can't reach, that can't take regular university extension work, except by correspondence (and that must be a little dry, 'wintry and sawdustish,' without a teacher or any human contact); people, who can't afford the commercial enterprises that flood our advertising columns, or who are, and perhaps rightly, distrustful of them, who hear no lectures, have no public library worth the name . . . in short, who are almost isolated from those things they have perhaps at some time been accustomed to, and lost, or have always thirsted for and never attained. It is not beyond the bounds of possibility that radio education can reach these people efficiently.

It will have to be organized, studied carefully, adapted to the situation. There will have to be full and carefully prepared lesson material, unlike my own, hastily flung together and scanty, outlines. There will have to be simple textbooks, guidance for the students, opportunities for correction of written work, all the machinery that will turn the thing from a recreation to a useful pursuit, worth spending time upon. There will have to be developed teachers who recognize the power of the personality of the human voice to impregnate and vitalize study with human interest. And finally, the radio broadcasting stations will have to realize that there is a large potential public, full of good will, that will not be satisfied with entertainment all the time, with music, or jazz, or comedy skits, or . . . above all . . . with disguised advertising . . . but that will furnish an eager and steady audience for the intelligent diffusion of ideas and culture and, in the largest sense of the word, of education.

I have just seen and been a part of the beginning of it. I shall see it grow. It is a very great satisfaction to have had a part, however small, in the pioneering.

Technology and Aeronautics

An authoritative address delivered before the Detroit Technology Association April 6, 1925

It is a source of particular gratification to those of us who are working on aeronautics at the Institute that this meeting should have been held to deal with this subject at this place, at this time, and under the particular circumstances here existing. It is an auspicious occasion for a discussion of commercial flying, for more progress has been made towards a real commercial use of aircraft in the United States in the last nine months than during the whole five years preceding. It is appropriate that such a meeting should be held in Detroit, the cradle of the automotive industry, so closely connected at so many points with the manufacture of aircraft, and the home of the Liberty engine. It is fitting that it should be a meeting of Technology men, for we cherish the record of the Institute's work in aeronautical engineering as an important and integral part of the long tradition of service to American science, industry, and commerce.

That work began some fifteen years ago, when a few of Professor Lanza's students, working under his general direction, made pioneer investigations in aerodynamics in a little wind tunnel built for the purpose; presenting the results as their theses for graduation, while the same students and some others undertook on their own account the design, construction, and testing of two gliders. It was continued when, in 1913, Lieutenant J. C. Hunsaker, now Commander Hunsaker and a naval attaché of the American Embassy in London, took charge of the professional instruction in the graduate course in aeronautical engineering. It has been continued without substantial

BY EDWARD P. WARNER, '17
Professor of Aeronautical Engineering

A TECHNOLOGY WHO'S WHO IN AERONAUTICS

If the Review Editors had to pick a handful of the Institute's most illustrious Alumni in the fascinating field of aeronautics, they would make a selection somewhat as below. Least of all would they omit the gentleman whose portrait graces the bottom of the page.

DONALD W. DOUGLAS, '14
Builder of the Douglas torpedoplanes and of the "ships" that flew around the world.

JEROME C. HUNSAKER, '12
First instructor in the graduate course in aeronautical engineering. In charge of design of naval aircraft during the war and for several years afterwards.

HENRY M. CRANE, '95
Consulting engineer for the first company to build engines in America from proved European designs during the war. Past President, Society of Automotive Engineers.

VIRGINIUS E. CLARK, '15
Former chief engineer at McCook Field. Since leaving the Army, chief engineer for two large airplane companies. Designer of the training airplane at present adopted as standard by the Army.

CLINTON W. HOWARD, '22
Chief engineer at McCook Field.

THOMAS H. HUFF, '15
President and chief engineer of the airplane company which bears his name.

GEORGE J. MEAD, '16
Chief engineer for one of the largest of American builders of aircraft engines.

WILLIAM H. MILLER, '22
In charge of aerodynamic research for the only American airplane company regularly operating its own wind tunnel.

HERBERT V. THADEN, '21
Engineer for a company investigating the construction and operation of all-metal airships. Inventor of a new type of mooring mast which they intend to use.

intermission from that day to this, modified during the war into a more intensive form to meet the urgent need of the hour for men trained as speedily as possible in the essentials of airplane design and the allied subjects. The course in airplane design has been taken, in the last eleven years, by well over two hundred students, and its graduates have played an important part in the development of American aircraft. Among their number is included every officer who has held the post of chief engineer at McCook Field the experimental station of the Army Air Service, since the field was opened in the early months of the war. For four years out of the last five the general supervision of airplane design activities at McCook has lain in the hands of Institute men from the aeronautical course, and they have directed what used to be called the "research department" (charged especially with the making of stress analyses and the investigation of aerodynamic problems) since its beginning, except for a lapse of a few months. The Institute's contribution to the Naval air establishment is a little less impressive, but nevertheless of distinct importance. It would still be of distinct importance if no connection could be traced except through Commander Hunsaker, head of the design branch of the Bureau of Aeronautics for five years during and after the war. In the industry we claim as Alumni of the aeronautical course the chief engineers of three of the principal airplane-manufacturing companies (two of whom are also the executive heads and the dominating factors in their respective enterprises) and the director



EDWARD P. WARNER, '17
Professor of Aeronautical Engineering

of the research department of a fourth. The course has received continual official recognition in that it is the only one of its kind to which officers of the Army and Navy air services are now or have at any time been detailed for instruction.

At the same time that the graduate course in aeronautical engineering was being started plans were being made for a wind tunnel, which was duly erected and went into operation in 1914 and has continued in operation ever since except for one break of a few days when the laboratory was being moved to a new site a couple of hundred yards distant from the old one; and another lapse of similar length when the tunnel was being rebuilt along modernized lines with the object of securing an increased efficiency. In point of duration of continuous service the aerodynamic laboratory at the Institute is the oldest in the United States, and one of the three or four oldest in the world. It has rendered a service of which the importance is generally conceded.

It was in 1913 that the really intensive part of this work began. Look back to 1913! What was the status of the airplane then, and what is it now?

When Commander Hunsaker began to teach at the Institute the record for airplane speed, now rapidly approaching five miles a minute, stood at about 120 miles an hour. It had been made by a machine which was little more than a winged projectile impelled through space by a power plant of a size and capacity beyond anything that was then used or considered usable in regular service machines. Even such aerodynamic information as was then available had not been used to the fullest extent, and with a landing



JEROME C. HUNSAKER, '12 © Clinedinst

First Instructor in the Graduate Course in Aeronautical Engineering and one of the Institute's best-known Aeronautical Engineers

treme, for although we were no longer in the halcyon days when enthusiasts used to gather along the edges of a flying field as a new machine was brought out for trial and make bets on whether or not it would get off the ground, the transition of airplane design from an art into a science was only beginning, and the

data from which calculations of speed and climb depend were still so scanty that the calculations themselves were of very limited usefulness.

The art of airplane engine design was in a state as primitive as that of the airplane itself. Long and heated discussions were still waged over the respective merits of L-head, T-head, and overhead-valve cylinders for aircraft use. A like argument was waged around the relative advantages of two, three or five

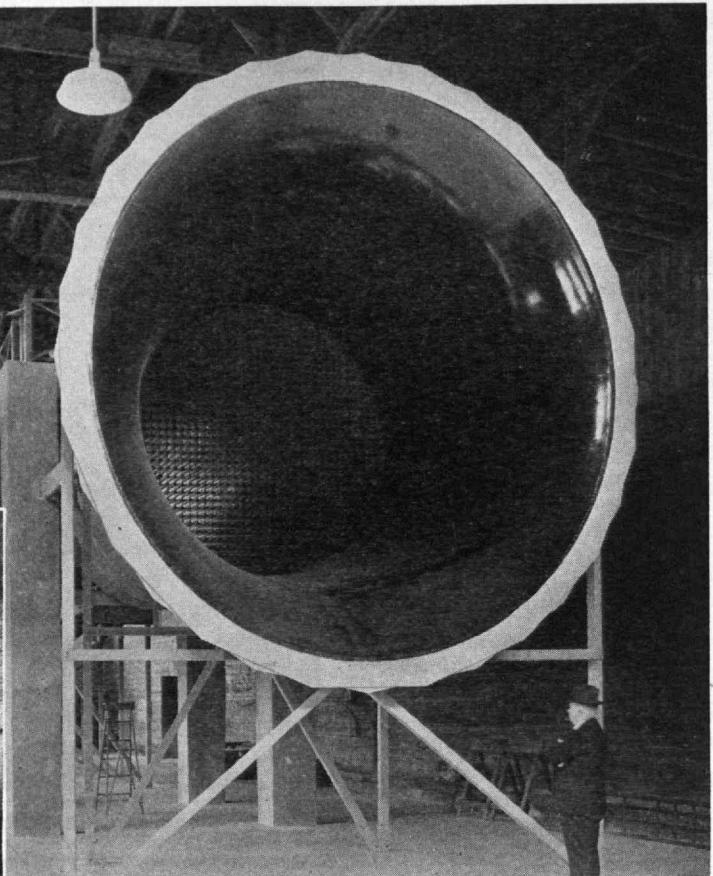
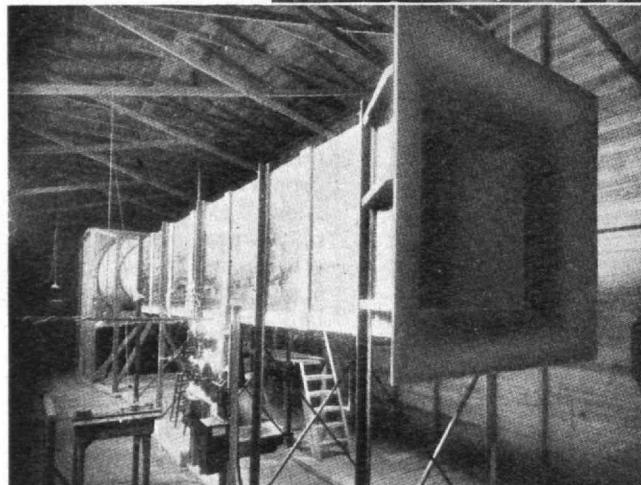


© Army Air Service

McCOOK FIELD

In the building and administration of which the Army Officers and civilians graduated from the Aeronautical Courses of the Institute have had an important share

main bearings for the crank-shafts of four-cylinder aero engines. Splash systems were commonly relied on as at least a secondary source of lubrication, and when radial engines, which had to run with some of the cylinders inverted, were used, they fell heir to just



THE INSTITUTE'S WIND TUNNELS

Upstream views of the old and the new tunnels, for aerodynamic investigation. The old tunnel was built in 1913

exactly as many lubrication troubles as might have been expected.

The United States Army air service in that distant day was a subordinate part of the Signal Corps. It possessed about fifteen airplanes, most of which were of types designed in 1911 (for the tractor biplane was only beginning to make itself felt) and about the same number of pilots.

That was the position in 1913. Compare it, contrast it, with 1925. If there is, in all recorded history, a better example of what can be accomplished by exhaustive study, by tireless and intensive research, it has not fallen within the field of my observation.

I was last in Detroit about two months ago, to attend the annual meeting of the Society of Automotive Engineers. President Horning of that organization, in an address at the opening of one of the sessions, took occasion to comment on and to criticise a seeming negligence on the part of the technical schools and colleges. He said, as I recall his remarks, and speaking, I suppose, with particular reference to the relation of education to the automotive industry, that the schools had their faces turned to the past and their eyes closed to the future, that they were teaching from textbooks twenty years old and were blind to present realities.

Whatever the justice of those strictures in some connections, no such indictment can be made to stand in respect of aeronautics. That it cannot, is due first of all to the vision and enterprise of President Richard C. Maclaurin, who saw the need for scientific study of

aircraft and took a leading part in creating the opportunity for such study at a time when the airplane and airship were hardly taken seriously even as instruments of war; when it is probable that not one person in twenty thousand had ever flown, that not one in five hundred had seen an airplane at close range. That is a memory of which we of Technology can be very proud.

It is a shameful thing that any department of education, and most of all of technical education, should have to bear the burden of a charge of mediævalism of method and of content. I cannot speak for any other institution than the one in which we here are primarily interested, but I am glad to be able to say to a Detroit audience, what most of you no doubt already know; that the training of automotive engineers is claiming very close attention from the responsible authorities at the Institute and that it is their evident intent that the ground for any such criticism as Mr. Horning's shall be removed. It may have been slow in receiving the recognition which is its due, but there is now an automotive option in the fourth year of the mechanical engineering course, an option which has been developed and extended from year to year and which has gained great popularity among the students.

The automobile has found its place in American life, and engineers must be trained to meet an existing demand in an industry of which the growth has been rapid beyond all precedent. The airplane has not yet definitely located itself. We have to try to train men

to meet conditions which will develop next year or five years from now, and necessarily we deal rather largely in futurities and prophecies. We know the importance of aircraft in war, even though we may not be sure of the exact nature of the rôle likely to be played in future war, but the scope of their use in peace is as yet inchoate and uncertain.

At the Institute, we believe in commercial flying. I am sure that I speak for Professor Brown, my associate in the work there, as well as for myself when I say that if we did not have faith in the practical importance of the airplane and airship in future transportation, if we thought that those craft were now and were destined to remain useful solely or even primarily as weapons of war, we would be in some other business.

We believe in commercial flying. Our faith is firm, and we are trying to impart that faith to our students by conveying to them a knowledge of the facts whereon it rests. We believe in commercial flying just as firmly as Bill Stout does, and that's the superlative degree.*

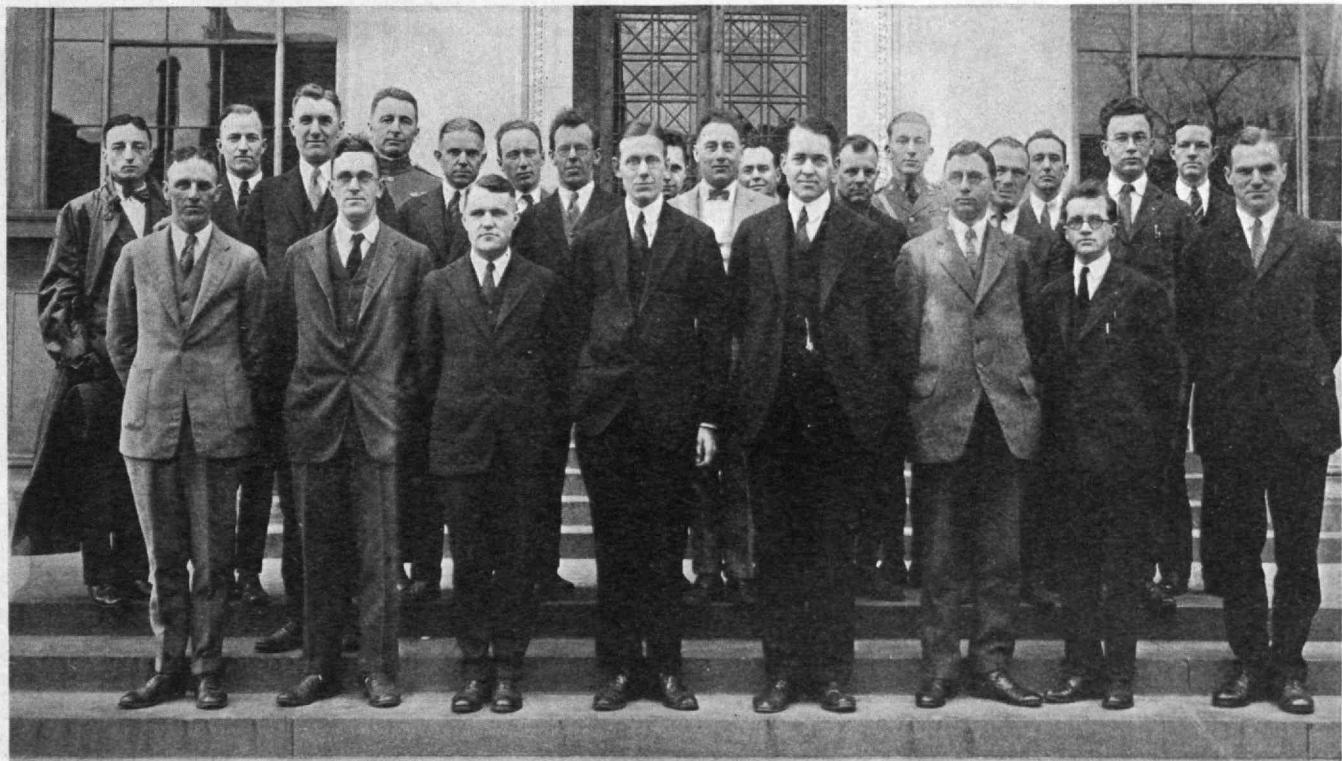
What aircraft can contribute to transportation has been proven in a score of ways. It has been proven by European experience with air lines and by the transoceanic flights of the R-34 and the Los Angeles. It has been proven most effectively of all by the record of the United States Air Mail, operating between New York and San Francisco by day and by night on a schedule calling for a mean total elapsed time of thirty-three hours. There is much to be done, however, before the promise of those achievements will be completely fulfilled.

* [Mr. William B. Stout is a pioneer in the construction of commercial airplanes in this country, and is at present building all-metal machines at Dearborn, working in coöperation with the Ford interests. He was a guest of the Detroit Technology Association at the April 6 meeting.]

A necessary first step is the development of public confidence, for there still exists a widespread feeling that there is something fundamentally immoral about getting both feet off the ground at once. A general failure to comprehend the degree of regularity and systematization which are attainable in the operation of aircraft militates even against mail and express lines. Public confidence will not come of its own accord, and it certainly will not come unless and until those who are most closely in touch with aeronautics and who are supposed to have most complete information on the subject display the quality of their own faith in no uncertain manner.

The airplane industry must produce airplanes suitable for commercial use before there will be commerce to use them. Only a few months ago, it would have been necessary for anyone wishing to operate an air transport line to purchase his machines abroad, as there was nothing in the United States which even approached suitability for the work. Foreign constructors had, in some cases, built the first machines of the new types at their own risk and in the hope of finding a market if the performance proved satisfactory. Americans will sooner or later have to do the same, even though there may be no encouraging subsidy.

Not only the builders of airplanes, but the potential operators as well, must produce or find the capital to back their judgment. Nothing will encourage the general public like the actual sight and certain knowledge of aircraft in regular and safe operation over fixed routes. It is necessary that there should come forward men whose own belief in the airplane is so profound and unwavering and whose financial strength is such that they will be able and willing to start those lines and to run them for some time if need be without profit, or at an actual loss. In Detroit, if anywhere, such men should be found.



STAFF AND STUDENTS IN AERONAUTICAL ENGINEERING

The staff from left to right is: J. P. Markham; S. Ober, (in second row); W. G. Brown; J. T. Nichols; W. L. LePage; E. P. Warner; C. P. Burgess; W. F. Eade

The Woolly West

An Alumnus in Mechanical Engineering tells of his life on the Wyoming plains and mountains

Grazing on the slopes of Russia, the veldts of South Africa, the plains of Australia and the vast mountain ranges of the United States are the millions of woolly animals that from time immemorial have clothed and fed the peoples of the world. These fleecy creatures have adapted themselves to the greatest extremes of climatic conditions in all parts of the globe and have thrived where other domestic animals barely could exist. The original of the sheep seems to be more or less obscure, but it was undoubtedly one of the first animals to be domesticated, for the sheepskin garments and the stone hatchet always have been accepted as the most important items in the equipment of our prehistoric ancestors. In earliest Biblical times, the flocks were the mainstay both of the tillers of the soil and of the tribes of nomads that roamed the earth. The docile sheep supplied clothing to keep them warm and meat to satisfy their hunger.

It is a far cry from the bolts of finely woven woolens piled in the smart tailor shops of Bond Street and Fifth Avenue, to the bands of sheep grazing on the

By CHARLES J. BELDEN, '10

Z Bar T Ranch, Pitchfork, Wyo.

remote highland pastures of the world's sheep ranges. The man discussing the cut of a coat or the pattern of a cloth does not picture the lonely sheep herder and his flock of "woollies" far up in the clouds on the highest reaches of the mountains, perhaps a hundred miles from any habitation. Nor does he see the sheep huddled together on a bed-ground under the lee of a hill while night after night raging blizzards swirl around them driving the snow over their backs. When the tailor tells him that the cloth is woven from the finest merino wool, it means little to him.

The growing and shearing of this wool on the vast desert and mountain ranges of the West is an industry that possesses the romantic fascination of anything that has to do with the great open spaces. The beginnings of the sheep industry in America date from the sixteenth century, when the Spanish conquistadores on their voyages of discovery brought sheep into Mexico. These sheep were the foundation of herds acquired by the Pueblo and Navajo Indians, who seemed to be particularly well fitted to be shepherds, and who de-



© Charles J. Belden

"WHEN SHEPHERDS WATCH THEIR FLOCKS BY NIGHT"

An unusual view of a band of sheep photographed by moonlight. The herder's light can be seen shining through the window of the sheep wagon, and the backs of the sheep show white under the silvery rays of the moon



ABOVE

The before and after of the degrading process of shearing

veloped great skill in weaving wool into blankets. When the Spaniards settled in California they were quick to realize the possibilities for grazing sheep on the great mountain ranges during the summer, and in the broad, flat valleys during the winter. These flocks were built up from heavy, shearing merino sheep which subsequently supplied a foundation for the range flocks of Oregon, Washington, Idaho, Montana and Wyoming.

As the sheep began to encroach on the grazing lands of the cattlemen, trouble began to brew. Violent range wars between sheep herders and cow-punchers were precipitated throughout the West. Blazing sheep wagons, dead herders and scattered bands of sheep proclaimed the vengeance of the cowmen. The sheepmen retaliated by sweeping across the ranges with band after band of sheep, cleaning off every vestige of feed. In the parlance of the range country they "ate out the cattlemen." In self protection many of the big cattle outfits began to "run" sheep and today practically all of the larger range



Both Photos
© Charles J. Belden

IN OVAL

Shearing the golden fleece—eight or nine pounds of it

cattle interests, especially in the Northwest, own many bands of sheep as well as cattle.

With the curtailment and fencing of the range country, the sheepman is far better able to cope with present conditions than the cattle owner. His flock is always under control day and night and he can hold them just where the feed is best, moving from one place to another easily and quickly as the occasion requires. The open-range business is fast disappearing and in the evolution of things pertaining to live stock, the old range methods have undergone many modifications.

Great acres of rich grass land, long supposed to be fit only for grazing, have been torn up by the farmer's plow or appropriated by tens of thousands of misguided homesteaders. These "dry landers," as they are termed in the vernacular of the West, have planted crops year after year on the broad acres of the plains country and a large proportion of them have reaped only rank failure. Much of the range land that has been plowed up under irrigation projects likewise has brought forth nothing but disaster.

Thousands of homestead farms through Wyoming and Montana have been deserted and buildings, fences and improvements have been left to the scant mercy of the elements and to the more rapid destruction by human agencies. Millions of acres thus will be returned eventually to the grazing of sheep and cattle, but the pity of it is that the grass land that has been broken with the plow will need half a decade or more in which to reseed and restore it to its natural state. In the West the 640-acre homestead law has been defined as an act whereby the Government is allowed to bet any citizen in good standing the sum of \$40.00 (this being the amount paid for the privilege of filing a claim on the land) that he cannot make a living for three years on a section of grazing land. In most cases the Government has won.

In the heyday of the open range in Montana more than 6,000,000 sheep grazed within her borders; today there are little more than 2,000,000. Texas once had 8,000,000 and now counts less than 3,000,000. Wyoming had at one time more than 5,000,000 sheep and now with 2,500,000 is one of the largest wool producers of the West. In 1900 there were over 61,000,000 sheep on the farms and ranges of the United States; according to the latest figures there are a scant 37,000,000. Australia is the world's largest wool-producing country, having sheared some 80,000,000 sheep last year; yet this is a decrease of 26,000,000 from the number that were counted out of Australian shearing corrals in 1891. It is small wonder, then, that wool at the present is bringing war-time prices.

The sheep in many ways is a strange creature and more than any other domestic animal is susceptible to the constant control and leadership of man. Without his never-ending supervision it soon becomes a victim of the elements or of predatory animals. Thus it is that in the Western range States sheep are handled in bands of 1500 to 3000 head, depending on the topography of the country, season of the year and other conditions. In some sections it is customary to "run" a large number of sheep in one band and to put two herders with them.

It is generally conceded, however, to be better practice, for many reasons, to have the bands only as large as one man and a dog can handle. During the winter, when the sheep are being herded on the open desert ranges, and the ewes are all "dry" (those that have no lambs), the bands comprise about 2500 head. In the summer months when every ewe should have a lamb and the sheep are taken into the rough mountain country, the bands are cut down to 1250 or 1500 head of ewes. All "dry" sheep are taken out of the ewe-and-lamb bands and are put into bands by themselves.

The sheep herder, like the cowpuncher, is a typical Western figure, whose characteristics have been developed by his contact with the great lone hills and the storm-filled weather of Western ranges. With the cowboy, too, he is vanishing like a mirage on the horizon, for the encroachments of civilization are disturbing to the peaceful grazing of his "woollies." The sheep herder of the sage-bush country bears little resemblance to the shepherd of popular fancy who, according to the poets, jauntily leads his flock with a tuneful lute or a song. The Western sheep herder has found through sad and wearing experience that the only practical method for moving a band of sheep is by the use of one or more dogs and much profanity.

There is always some conjecture about the mental status of anyone who is willing to lead the lonely existence of a sheep herder or, as the cowboys are fond of calling him, a "mutton-puncher." There is one thing certain in the minds of all cowmen, however — if a man is not crazy before he starts herding sheep, he is bound to arrive at that state within a few months. It is true that the vocation of the herder does not possess the romantic background as that of the cowboy.

Neither in story books nor in matter-of-fact life does a sheep-herder ever win the heart of the local "schoolma'am." The herder doesn't carry around the "make-up" of the cowpunchers: their "two gallon" Stetson hats, silver-mounted bridles, spurs and saddles, fancy



SHEEP ENTERING THE WORLD'S BIGGEST PASTURE
Rangers of the National Forest Service counting sheep as they enter
Uncle Sam's vast Forest Ranges

© Charles J. Belden

chaps and high-heeled boots — for the tender of flocks was never intended to set feminine hearts a-flutter. Twenty-four hours a day and three hundred and sixty-five days of the year he has to be at least within earshot of his "woollies." Every night of his life he makes his bed on the same bed-ground with his flock,

whether it is in his sheep wagon during the winter or in his teepee high on the mountain side during the summer grazing season.

Notwithstanding the popular attitude toward the job, the herder carries more responsibility on his shoulders than any other worker on the range or on the farm. For ninety per cent of his time he has absolute charge of some twenty-five or thirty thousand dollars worth of highly perishable property. A single false move may cost the owner dearly. It is not an unusual occurrence for an inexperienced herder to send his dog barking around the band on the edge of a gulch or bank, with the result that the sheep are "piled up" at the bottom, perhaps killing from fifty to several hundred head.

Sometimes the herder himself pays dearly for his carelessness or ignorance, as occurred one stormy night when a certain sheep herder pitched his teepee and bedded his flock under the lee of a hill, well protected as he thought, from the fury of the elements. All night long a blizzard raged overhead, dropping the snow gently but steadily on the sleeping herder and his flock, until sheep and teepee were completely buried. When morning came the man found himself a prisoner in his own bed, for when he tried to move, the slight jar on the eight or ten feet of drifted snow above him settled it down so that it crushed the teepee around him, leaving only a small space over his head. Fortunately, snow is sufficiently porous so that he was able to get sufficient air for breathing, but it was not until the following day that he was dug out by his camp tender. The sheep were likewise completely buried, and could only be located by means of the air holes made by their warm breath rising through the snow. Most of the sheep were dug out, but it was impossible to find all of them and a full ten days passed before they were all rescued. The last of them, of course, were very weak.

The merino sheep are naturally gregarious and consequently are best adapted for herding on the range, but in rough country a small bunch is very liable to be cut off from the main herd and is easy prey for any wandering coyote. Perhaps the greatest drawback to herding is the constant worry over possible lost sheep. When a herder is sent out with a band of sheep they are counted by the boss and the herder is told how many sheep he has. The next time they are brought to the corrals he must be able to account for them all.

On the range it is impossible for one man to count a band of three thousand sheep by himself. It is likewise impossible to judge accurately of this number by the general appearance of the herd. In order to enable the herder to know roughly if his herd is intact, a certain number of "markers" and "bell sheep" are included in every band. The markers are black or peculiarly marked ewes or wethers that are easily distinguishable from the other sheep. The presence of all the markers (there are usually twenty or more to the band) might have no significance at all, since it is entirely possible to lose a small bunch without a marker being among them. Whenever a herder counts his markers, however, and finds one missing, he knows that he has lost some sheep.

Speaking of markers brings to mind the man who, having acquired his first band of sheep, discovered that among the two thousand head there was not a single marker of any description. He had been told that every well ordered band of sheep should have a dozen or so markers for the reasons related above, and the

lack of any black sheep in his flock was a source of great annoyance to him.

Finally this flockmaster conceived the idea of dying some of his sheep black, and he accordingly sent to town and purchased the local drug store's entire stock of black dye. This was mixed up in a large washtub and a dozen of the "woollies" promptly went into deep mourning. The sheepman was much pleased with his ingenuity, but his satisfaction was short-lived, for when the artificial markers were turned back into the herd a veritable stampede took place. The ewes did not like either the looks or the smell of these painted creatures so they fled, and "stood not on the order of their going." With the aid of several dogs and two or three men on horseback the herder finally halted his sheep on their non-stop run and gathered them together from all points of the landscape. They could not be reconciled, however, to the man-made markers and consistently refused to admit them to the flock.

The tenderfoot in the sheep industry of the Western range country seems to be open to even greater mistakes than the beginner in the cattle business. Bad judgment and mismanagement with sheep usually prove far more costly than with any other class of livestock. The sheep is a most helpless creature; she is almost entirely lacking in initiative and seems to be constantly in need of a helping hand. During the spring, just before shearing, a very common cause of loss arises through sheep which get on their backs in a ditch or sometimes even on level ground. If the herder does not happen to find them, the poor helpless things lie there vainly kicking their legs in the air, until they die.

Through the lambing season, which generally begins about the first of May on the ranges of the Northwest, each band of sheep requires the attention of ten or a dozen men. There is a day herder and a night herder and numerous assistants to see that the newcomers to the range get a proper start in life. In order to secure a maximum growth during the spring and summer, it is necessary that the lambs come as early in the season as possible and "lambing time" is therefore brought as near to the last of the winter as is reasonably safe.

Late storms, however, interfere only too often with the plans of the sheepman. A large percentage of the lambs born during such storms are lost, but this is just one of the many gambles of handling sheep on the open range. The story is told of an Easterner who purchased a large sheep outfit in the range country. As they say in the West, he was "a plumb stranger to a sheep" and made many ludicrous and costly mistakes. One spring during a series of bad storms through the West he telegraphed his foreman to know what the conditions were on the ranch. The foreman wired back that lambing was just starting and that on account of deep snows the losses would be pretty heavy. In great haste the Eastern sheep owner sent the following telegram: "Postpone lambing until weather modifies."

Although the calling of the sheep herder is one of solitude, there are many compensations for the drawbacks. The monotony of herding is relieved both by the ever-changing scene as the band grazes from one part of the range to another and by the varying moods of the sheep, for they rarely act the same two days in succession. Except at rare intervals the herder is practically his own boss and is able to be the most independent of all wage earners, with ample opportunity to live his own life as he may see fit.

The Marine Exhibit

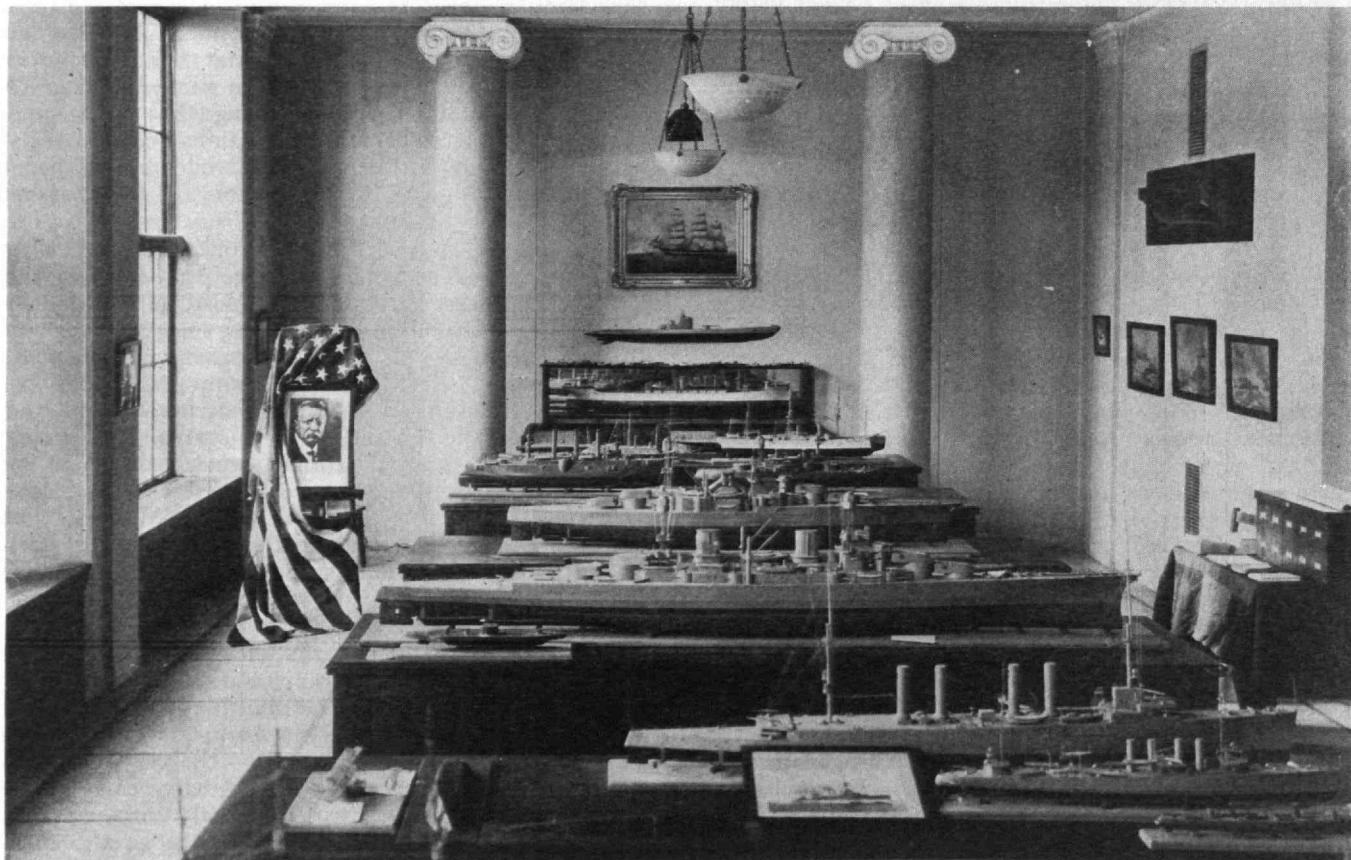
The Institute augments its permanent Clark collection with the temporary addition of some fascinating "materia marina"

On April 3, President Stratton and Professor J. R. Jack, Head of the Pratt School of Naval Architecture at the Institute, were hosts at a tea and private view of an historical exhibition of warship models and prints which is being held in the Museum of the Pratt Memorial. Invitations to the function were sent to members of various Boston Art Clubs, Historical and Marine societies, to a number of naval officers, to members of the Corporation and the Faculty. The guests of honor were Admiral and Mrs. de Steiguer, U. S. N., Captain and Mrs. Simmers, U. S. N., and Captain and Mrs. Fliess of the Argentinean battleship *Rivadavia* which is in dry dock in Boston. The response to the invitations was even greater than had been expected. It is estimated that seven hundred and fifty people passed through the museum during the hours of the viewing. Certainly more than three hundred and fifty partook of the refreshments provided. The exhibition will be open to the public until June 16, from ten to three on week days and from nine to one on Saturdays.

The exhibition may be divided broadly into four parts: one of maps, another of books, a third of marine prints and a fourth of ship's models. There are numerous other interesting objects that fall in none of these classes. Perhaps the most fascinating of these is the eagle figurehead of the old ship *Nightingale*, which originally carried a figurehead representing Jenny Lind, "The Swedish Nightingale," after whom the ship was named. Later the eagle was placed on

the bow and the ship was used as a slave trader. When she was captured with a load of slaves aboard she was sailed back to Liberia, where the slaves were disembarked and then she was brought back to durance vile in Boston, where the figurehead now on exhibition was removed. Again, if the visitor chances to be in the museum at the half hour or hour he will be startled to find the muted rooms wakened by the sonorous clanging of an undeniably real ship's bell.

Most of the rarer maps and books were loaned to the exhibition by Francis Russell Hart, '89, of the Institute Corporation. The others came to the showing through various Alumni and friends or else belong to the Clark Collection which is the property of the Institute. There one may see a delightful map by Ortelius, dated 1579, which attributes to the Americas a size actually attained only in the most golden vision of the most superlative Babbitt. There is also a map of the world in 1572 showing the same propensities toward magnification of the New World. Both of these are done in the brilliant coloring and amusing draughtsmanship of the time and the second one, drawn shortly after Mercator invented his projection, shows clearly the first effect of that invention. The globe appears as the projection of a torus. Europe, Asia, and Africa appear in their accepted proportions, but North America leaps far to the northwest and Cape Horn narrowly grazes a large amorphous region, obviously quite nebulous in the cosmographer's mind, which he calls Australia or Terra Incognita. In ad-



"SHIPS OF THE LINE"

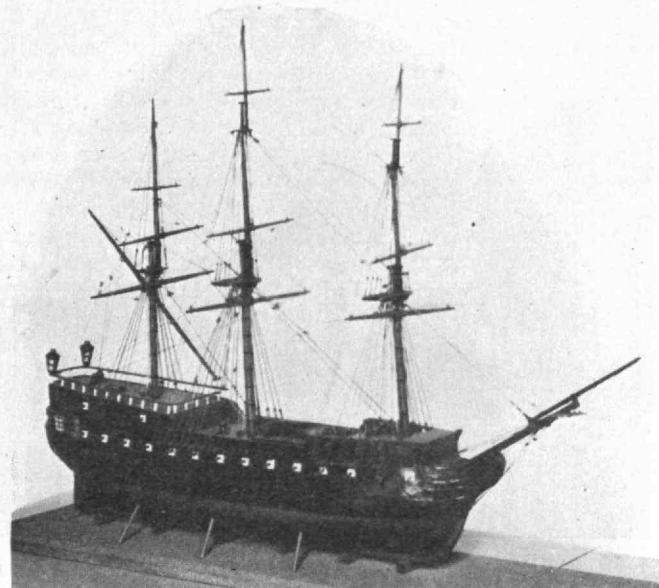
A corner of the exhibit room in Pratt Memorial which is devoted to a display of battleships

dition to these maps there is one worthy of attention, drawn by Admiral Rodney giving the layout of his famous naval battle with de Grasse in 1782.

The rare books are many and of varying interest, but all deal with nautical subjects. Probably the most valuable is one of the seven known extant copies of an original edition of Ptolemy's "Geography" published in Vicenza dated 1475 while another by De Bry entitled "Great American Voyages" bears on its gorgeous title page the signature of Archduke Ferdinand of Austria, to whom it belonged. Another book of great interest is the *Flateyiarbok*, loaned by Professor William Hovgaard, which contains a copy of the original manuscripts concerning Leif Ericsson as well as a very readable English translation of the Viking's exploits.

The marine prints are better known as many have been shown in previous exhibitions. They are taken either from the Clark or the Taylor collection. The prints are arranged by nationality so that it is possible to make interesting and frequently amusing comparisons between the ideas of Dutch, Spanish, French, English and American lithographers. By far the most valuable print in the exhibition is an engraving made in Venice in 1592 showing the naval review held on the Lido in honor of Henry III, King of Navarre, on the occasion of his Venetian visit in 1574. Vying with this is the undoubtedly realistic illustration of the glorious victory of Don John of Austria at Lepanto and a stirring picture of the death combat between the *Bon Homme Richard* and the *Serapis*.

The ship's models, despite their lack of antiquity, attract most attention. Here the lover of any form of boat may find something for his delectation from a Greenland Kayak to the stunning *Victoria Luise*—one of the largest transatlantic steamers; from the earliest ship of William the Conqueror to a mighty modern ship of the line or the NC-4; from the slow moving Baltic boat to the clipper of another day, or a prize winning yacht. The models are beautiful in workmanship and many are from the Institute shops.



THE "BON HOMME RICHARD"

A beautiful little scaled model of the French merchantman that was named for Benjamin Franklin

The most stunning of all these boats is the magnificent old *Clovis N. Bacon*, about three feet long, which is complete in every detail of rigging and equipment down to a moving compass needle in the binnacle. Another model of great interest is that of the yacht *Riowna*, designed by Professor George Owen, '94, which has carried off racing prizes and which is the owner of a medal from the city of Toronto. The medal is also on exhibition. Another beautiful craft is a ship of the Mayflower period designed and executed by another professor of the department whose modesty forbade a card in the exhibition giving his name. And so to the end of the chapter.

The Marine Museum is perhaps at the moment the brightest spot in Technology and will repay anyone the visit.

The March Council Meeting

A brief note on an important meeting

Although an extended account of the One Hundred and Twelfth Meeting of the Alumni Council is impossible for reasons of space, it should be recorded that an interesting and important meeting was held in Walker Memorial on March 30. Kenneth Moller, '07, Chairman of the General Committee of the Forthcoming All-Technology Reunion was present and reported as did a majority of sub-committee chairmen.

The entertainment feature of the evening was supplied by Bursar Ford who presented to the Council the lecture on the Institute of today, its customs and its traditions, which he was prevented through illness from delivering at the February meeting. He illustrated his talk with lantern slides of the new and old Technology and the personages who had made it. Mr. Ford concluded with three specific recommendations upon which he believed the Alumni should have acted before now, and upon which it would be highly appropriate to act at any time during the present.

The first was a memorial to William Barton Rogers who labored for 36 years in the actual creation of the Institute and who gave his life to it. The second was a memorial to Richard C. Maclaurin who, like President Rogers, died in his service to Technology. Mr. Ford went further, and made a specific suggestion for the form such a memorial might take, pointing to the lack of an adequate auditorium which the Institute at the present time so keenly felt and suggesting that "Maclaurin Hall" built between Walker Memorial and the educational buildings would form a most fitting tribute to the great seventh president. The third of Mr. Ford's recommendations was a program for the utilization of the Institute lands west of Massachusetts Avenue, particularly with reference to student recreations. Upon his conclusion, the Council voted a rising vote of thanks to him for the inspiration and stimulation which he had provided.



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"TAKE ME BACK TO TECH"

More About the Reunion

The Chairman of the Committee on "See Tech at Play" tells all about it

In spite of any impressions that may have inroaded themselves upon your imagination from a study of the flippant paragraphs in *The Boomerang*, that lusty Mouth Organ — our error, House Organ — of the 1925 All-Technology Reunion, the evidence remains that the Institute is extending to its Alumni and their families a cordial and sincere invitation to visit its buildings on the morning and afternoon of June 11 and see for themselves the new laboratories and other great additions to the facilities and equipment that it has made, especially during the last few years.

Some well-meaning person, who evidently uses the Old Style Calendar, in speaking of this feature used as a slogan, "See Tech at Work." This was thoroughly well intentioned and apparently presumed that the Alumni were to be permitted to look upon the sweltering undergraduates in their principal, though not necessarily favorite, indoor sports; that is, feverishly working their slide-rules and running their fingers through their hair in the laboratory atmosphere of whirring motors, pulsating machinery and odoriferous reactions.

But the Committee in charge of this part of the program holds forth no such alluring attraction.

By HORACE S. FORD
Bursar of the Institute

Having consulted the Calendar (New Style) it can state without fear of contradiction that any undergraduate caught on the premises on that day in anything except an R. O. T. C. uniform (see reference below) is one of the very few men trying out the first two or three courses offered in our Summer Session — courses which simply cannot wait until the regular year is quite complete before foisting themselves on the student body. We may therefore safely discard the idea of seeing anyone at work around Tech that day and revise that slogan to read "See Tech at Play." We are going to ask you to don once again the care-free garb of youth and come back to Tech with the distinct understanding that we are planning to give over the day entirely to the making of a real Institute Holiday. And we think you are going to find it both an interesting and instructive one, too!

Right at the start two suggestions superimpose themselves on any others that we can think of without effort. One is: come over in the morning at about ten o'clock, register at the Information Office, Room 10-100, just off the Main Lobby and be prepared to make a day of it. Lunch baskets will not be necessary. The other is: it won't hurt our

Calendar of the Reunion

THURSDAY, JUNE ELEVEN

Morning — Registration: Main Lobby

Noon — Buffet Lunch: Walker Memorial

Afternoon — Departmental Inspections
President's Tea

Evening — Jamboree Dinner: Boston

FRIDAY, JUNE TWELVE

All Day — Harbor Trip

Evening — Tech Night at the Pops

SATURDAY, JUNE THIRTEEN &

SUNDAY, JUNE FOURTEEN

Class Reunions as arranged

Note: — To date of publication 2270 Alumni have indicated that they will attend the Reunion. This figure represents an increase of 429 in the last thirty days.

feelings a bit if you refuse to plod through 1000 feet, more or less, of beach pebbles in the so-called Great Court. Those pebbles have admirably served their more than temporary purpose and we are cutting into them bit by bit with grass and hedge and shrubbery. But there is a vast heap of them left still and we share with you the hope that they will all find themselves soon playing the part of "Six" in the well known "One—Two—Six" mixture. You may save these many steps (and the Committee is doing all it can to save steps for you, fully realizing that Marathons are *de trop* after April 19 in these parts) by coming in via the Massachusetts Avenue entrance, or, if you are using your motor, by driving in at the roadway to the rear of the buildings and parking in the ample spaces provided near the Dome. We just *know* that you will arrive in a festive mood if you will avoid those pebbles!

Registration over (a very simple process) you will receive a printed program offering a list of Special Exhibits, sufficiently diversified to tempt you, be you Chemist, Engineer, Scientist, Executive or Aluminum Ware Salesman. (As the vaudeville program has it, "The order does not necessarily indicate the value of the act.") The next move, especially if you are unfamiliar with the outwardly intricate but really easy-after-four-years system of building and room numbers, is to seize upon the first R. O. T. C. uniform in sight.

The young man who fills that uniform is a *Tech Guide* for the day. He does not require a goad or the knout to make him wear that uniform, as was perhaps the case in your "good old days," and after you have made a visual inventory of him you will understand why.

The *Guide* will gladly take you to any of the Special Exhibits listed on your program or to visit any Professor or see any part of the buildings you may desire.

If you feel that you would like to have the entertainment brought to you, on a silver screen as it were, you have only to ask him to take you to either of our two big Lecture Halls and fit you into a tablet armchair (we have assorted sizes). You may then see not only pictures and films of Technology, old and new, but also some of the best industrial and scientific films that can be secured, many of which were made with the assistance of members of the Institute Staff or for industries directed by Technology men. We do not plan to include your favorite Timely Topics, Krazy Komics or Triangle Feature Film. And it may prove the only time in your life that you've seen a movie minus bathing girls. We will ease this somewhat by permitting you to smoke — or rather, if you will disregard the "You are requested not to Smoke" signs, posted in the corridors, as effectively as both Instructing Staff and Undergraduates do ordinarily, no one will suspect that you are not a regular tenant on the premises.

No mention will be made here of the Special Exhibits which members of the Committee are working up for your entertainment. What we *do* want to emphasize is that this holiday of ours is not merely a matter of throwing open the doors and daring you to come in.

Last week we had a visitor — an Alumnus.

He said "See here, I've been in these buildings twice since the opening, and all I've seen is some mile-long corridors and a perfect battery of locked doors. How do I get at some of the interesting things you tell us about without being arrested for breaking and entering?"

This man was taken in hand by our most experienced Guide and was treated to the same sort of "Seeing

Tech Trip" that (Special Exhibits excepted) is planned for you. After visiting all the Departments in which he was interested and calling on some of his old Professors, he was finally berthed safely at the Ship Exhibition in the new Marine Museum. It happened to be the opening day and the Tea Party was in full swing. That didn't exactly spoil his trip.

Now what was done for this man is about what the Committee will attempt to carry out with *all* of you on June 11. And if you've read *The Boomerang* you will note that Allan Rowe's Committee is winding up this part of the program with a "Tea-Fight" at the President's House in the late afternoon. (It is rumored that on account of the proximity of our Dormitory, "Fair Harvard" will not be sung by our Choral Society on this occasion.)

Our Committee also has not forgotten that a Holiday is incomplete without an appetite, and something to assuage it. However, there will be no occasion for anxiety on that score. You will be invited to step across to Walker Memorial at noon, partake of a buffet luncheon in our great Dining Hall — a gorgeous room now — and see something of the increase and development of the undergraduate activities and recreational facilities that the Institute has been fostering in recent years. The fine start in a comprehensive Dormitory System, including the new "Ninety-Three" Unit, is but a few steps away. If you happen to have a growing boy in his 'teens, you might compare the facilities and conveniences awaiting him with some recollections you may have retained of those hall bedrooms on St. James Avenue and St. Botolph Street.

And be sure, some time during the day to look to the West across Massachusetts Avenue and get the picture in your mind of the vast tract of new land purchased by the Institute during the past year — thirty acres of it — which brings our total acreage in Cambridge to about eighty.

When General Walker came to the Institute in 1881, he found it endowed with meagre facilities and resources, but rich in its splendid Instructing Staff. In spite of all difficulties he succeeded in revitalizing and enriching every phase of Institute life. More than a decade after his death Richard C. Maclaurin laid his hand on the task of providing facilities and resources that would keep pace with the fine work of the Staff. Just what latent power was behind that hand has been demonstrated in a most convincing fashion, but you possibly have not grasped that the extent of the increase in our equipment and resources during his administration, is something over \$25,000,000.00! Ask yourself therefore: if Tech in the past has been able to do such effective work in the field of education, to what greater usefulness may we not look forward, equipped as we are with ample room for breathing and expansion, a modern plant, constantly increasing facilities, a Staff alive to its opportunities and a growing army of Alumni to urge us on?

Now we have come back to earth, and we think you will all agree — as Mert Emerson would say — that June 11 might be made a memorable day, especially if you will come over and join our "play."

The Committee is leaving no stone unturned to make everything go "like sweetbreads-on-toast at a Vegetarian Dinner." All we need is your company and lots of it. Ask your wife or your Secretary to remind you to get here on time on the morning of June 11. Bring her along too . . . bless you, no . . . we mean your wife, of course.

UNDERGRADUATE AFFAIRS

Under Which Song, Bezonian?

The road of the prize song writer at Technology is not bestrewn with rose petals, nor do garlanded youths dance their way before the happy author caroling forth the joyous burden of their new lay. Professor L. M. Pas-sano is the latest crowned victor to find truth in a very old adage.

The song which won the prize this year was commented upon editorially in the April issue of *The Review*. It seemed for many reasons the best thing that had yet been offered in the way of something to replace the traditional Stein Song. But even with its publication there were heard carping voices, of which the most bitter declared that the objection to the old song was that the words were by a Dartmouth man and that the new song went the old one one better, in that the words were by a Johns Hopkins man. However, it was more a matter of neglect than of scorn that seemed to be dooming the present song to the same dusty pigeon hole that had consumed its predecessors.

With this in mind the Institute Committee, laudable in intention, took drastic action. To pay good money in prizes and then ignore the prize-winning efforts was bad economy, they said. The usual route of every song seemed to be inspiration, composition, compensation and oblivion. The last step it was in their power to remove. Accordingly they issued a manifesto banning The Stein Song for one year and substituting for it The Courts of M. I. T.

The superlatives of yellow journalism would scarcely be adequate to describe the loud howl that arose from every corner of the Institute. Almost over night two hundred names appeared on a petition demanding a plebiscite on the matter. Accordingly the vote was taken and despite the fact that the total vote represented only a little more than a fifth of the student body it was overwhelming in its voice. The count stood 537 to 92 in favor of retaining The Stein Song.

What is now to be done is a question. The alternatives on which the students voted were whether the new song should be used to the exclusion of The Stein Song or whether the two should be used in conjunction. The proponents of the latter have prevailed. It does seem to an unprejudiced observer to

"THE COURTS OF M. I. T."

Tune: *The Stein Song*

I.

*The breeze is on the River,
And the sunlight's on the grass;
The leaves are all a-quiver;
Cloud shadows come and pass;
And it's always fair weather
When good fellows get together
In the joy of their springtime,
In the arms of M. I. T.*

CHORUS

*Yes, it's always fair weather
When good fellows get together
In the hall of old Walker
And the Courts of M. I. T.*

II.

*The evening's blazing glory
Fills the heaven in the west,
And the sun sets back of Corey,
Flinging flame on Beacon's crest;
And it's always fair weather
When good fellows get together
In the joy of their springtime,
In the arms of M. I. T.*

III.

*When night broods on the River
And the twinkling lights aglow,
And the air is all a-shiver
With the crack of ice and snow,
Still it's always fair weather
When good fellows get together
In the joy of their springtime,
In the arms of M. I. T.*

IV.

*And the crowned Dome, watching
The Great Court in its sleep, [over
Sees departed leaders hover
And faithful vigil keep.
For it's always fair weather
When good fellows get together;
Maclaurin, Walker, Rogers,
In the hearts of M. I. T.*

CHORUS

*Yes, it's always fair weather
When good fellows get together;
Maclaurin, Walker, Rogers,
In the hearts of M. I. T.*

V.

*When the long years have departed,
And our sons and grandsons reign,
We'll be dead but not downhearted;
We'll come marching back again.
For it's always fair weather
When good fellows get together
In the haunts of their springtime,
In the arms of M. I. T.*

VI.

*Then rally, Tech men, rally
To Alma Mater's call;
Fill up the golden tally;
Our mother needs us all.
For it's always fair weather;
Come, good fellows, get together
In the joy of our springtime,
In the arms of M. I. T.*

CHORUS

*For it's always fair weather;
Come, good fellows, get together.
Or quick or dead, shout "present!"
Ye sons of M. I. T.*

be a bit difficult to persuade any body of men to sing two songs to the same tune in the same afternoon or evening. This difficulty may be straightened out. At any rate, the action of the Institute Committee has focused attention on a crying ill in connection with the Prize Song Competition. After all, the true solution seems to be to find a composition of such genius that no one wants the old and all want the new. Apparently there is little opinion to say that that has happened up to the present time.

Christening

A General officer of the United States Army came to town, at noon airplanes circled over the Basin and shed much smoke (see page 358). The smudge drifted over Beacon Hill to the discomfort of besmirched onlookers. It blew away several hours later, the placid waters displayed their accustomed calm, the sun was setting behind the bleachers at Braves Field and the wane of daylight had set in. A taxi cab chugged westward along Memorial Drive; its occupant tense but calm, keen for his destination and his mission. Unlike another taxi rider of a few days previous he knew that he would arrive at the appointed hour. His summons had been expected, he was called from his desk and not his bed. His equipment was superb, his apparatus in order, his audience expectant, and — his taxi did not fail him. He descended therefrom, said a few kind but unrecorded words and then took his leave. Photographers were present and his actions are here reproduced. Technology's new shell — the first built expressly for the Institute Navy — had been regularly and duly constituted the *Avery H. Stanton* in accord with the wish of its unnamed donor.

Built by Simms, of Putney, England, it was greatly admired for its graceful lines and finished workmanship by the assembled gathering of oarsmen and spectators. The money for it was given anonymously with the stipulation that it be named after Avery H. Stanton, '25, who retires this month as President of the M. I. T. A. A. and who was manager of crew during the season of 1923-24. It will be used this year only in the home waters in the quadrangular race on May 9 against Harvard, Cornell, and



THE DOCTOR TILTS THE BOTTLE

In accordance with old established law, custom and usage the "Avery H. Stanton" is christened. Dr. Allan Winter Rowe, '01, officiates with the assistance of Coach William Haines on the float of the Technology boathouse on March 26. Conservation of the liquid prevented permanent injury to the deck finish. Inset: Avery H. Stanton, '25, after whom the shell was named.

Pennsylvania. For the Navy race and at Columbia the Varsity will row in borrowed shells on account of the hazards of transporting the shell to these two places as well as because of the prohibitive expense.

As these lines are written, it is too early to prophecy the season's outcome from a victory standpoint. Coach Haines, we are happy to announce, agrees with us about this, or perhaps we should say that we agree with him. In either case we are hopeful, sanguine and expectant as to the results which this department of The Review will publish in the July issue. He says, "We are to make a sustained try for a good crew and

the spirit shown by the men in the boat encourages me to believe that M. I. T. will row creditably in all of this season's races. You are well aware that Technology will not have an easy race during the season. We are accustomed to meet tough-fighting crews and that tends to stretch out the boys and make better men of them."



"THE DUCHESS OF BROADWAY"
Richard Whiting, '26 and R. B. Jones, '28
of Tech Show fame



Athletic Results to April 10

FENCING

Mar. 10—M. I. T., 11; Dartmouth, 2, at Walker Gym.
Mar. 14—Yale, 7; M. I. T., 4, at New Haven.

GYM

Mar. 14—University of Pennsylvania, 31½; M. I. T., 21½, at Walker Gym.
Mar. 28—Intercollegiates, M. I. T., last place, at Hanover.

Rifle

Mar. 21—M. I. T., 443; Iowa State, 420.

WRESTLING

Mar. 20 & 21—Intercollegiates, at Harvard.
Harvard, first; Brown, second; M. I. T., third.

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The Bibliography Section will next be published

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NEWS FROM THE ALUMNI CLUBS

Indiana Association of the M. I. T.

Saturday, March 28, was the day chosen by Secretary Denison for his stop at Indianapolis on his way around his circuit of visits to various clubs. This Association arranged that his visit coincide with the time for our Annual Ladies' Night and accordingly invitations were extended to the ladies who made up a fair proportion of the attendance at a very happy and successful party. The University Club, at which the meeting was held, is well equipped and arranged for informal, homey meetings and the spirit of good fellowship was quite in keeping with the surroundings.

A very informal though satisfying dinner was the first thing needing attention and it got it. The guests were seated in groups of eight or ten at round tables. Decorations were confined to M. I. T. miniature pennants arranged in rays about a central Tech seal. Another touch of color was provided by the usual fantastic paper caps. A large Technology banner spanned the alcove above the speaker's table. As dinner progressed, Dennie, in his characteristic and engaging style, led in the singing of the standard Technology songs, each one of which was followed by one of his own specialties. Several of these were "By Request" being remembered from his 1923 visit.

But Dennie had a rival. William Turner, S. M. A. graduate, and now Professor of Practical Mechanics at Purdue, and a member of our Club, was on hand with his harmonica. It is hard to believe what is in this instrument until an artist like friend Turner brings it out.

Our committee had provided from the pen of Wilson B. Parker, '88, a very attractive menu, the cover an artistic sketch of the Technology buildings and the menu itself paralleling by number the list of courses at the Institute and associating each article with the course so numbered.

One of our usually faithful attendants being ill, a greeting signed by all was forwarded to him. This was in the form of some appropriate and friendly verses written by the Secretary.

After dinner, Dennie delivered his message of Alumni affairs, of Institute affairs and of the coming Reunion. He was ably seconded by Calvin W. Rice, '90, Secretary of the American Society of Mechanical Engineers. We were very fortunate and pleased to have him with us. Business had brought him to town on Friday and he remained over for our occasion, spending a day discussing Institute affairs with Dennie.

Rice stressed our obligations as Alumni to our Alma Mater — the good old M. I. T. Dennie's films came next, during the unavoidable pauses in which there was much friendly fun and banter and also the distribution of very unexpected souvenirs by A. I. Franklin, '98, our President. These were effective samples of Bixby's best.

The party ended with dancing, music furnished by Montani's Orchestra, and this ended a glorious time well attended and well enjoyed.

The January Meeting of the Association was as usual at the University Club, and consisted of dinner followed by a talk by Mr. O. C. Berry of the Wheeler and Schebler Carburetor Company of Indianapolis. Mr. Berry discussed the recent tendencies and progress in automobile design, practice and operation. About twenty of the fellows were present.

The Indiana Association holds its meetings at the University Club, on the last Monday evening of the month. Dinner is at 6:30. We hope all Alumni coming this way will communicate with the Secretary and if possible arrange their visits to meet this date. However, do not hesitate to make yourself known at any other time for we are quick acting and can get things moving in short notice. We want to show you our brand of fellowship.

A fine selection of drawings from the Department of Architecture was recently exhibited here in the fourth exhibition of Indiana Architects at the John Herson Art Institute. The drawings, representing recent student work, made a very favorable impression and compared favorably with similar work shown from the University of Illinois and Cornell. The exhibition was especially pleasing to



"LADIES' NIGHT"

Saturday, March 28, the Indiana Association of the M. I. T. chose for this fitting celebration at the University Club of Indianapolis. Diligent search will reveal the then traveling Secretary-Treasurer of the Alumni Association, but where is the piano at which he sang "Pie, Pie, Pie"?

local Tech men as it showed the superiority of work now done at Tech.

L. W. Bugbee, '94, has been very seriously ill for some weeks past. His friends are however much pleased to learn of his marked though gradual improvement. Bugbee is Factory Manager of the Onepiece Bifocal Lens Company and one of our very enthusiastic and loyal members.

Indiana's loss is somebody else's gain, so we must be reconciled to the departure of A. B. Morrill, '09, to Detroit. Morrill is a Course XI man and has been engaged on our sewage disposal project now about completed.

A. A. Turner, '21, has moved to Pittsburgh. M. O. Southworth, '90, of Fairbanks Morse & Company, is now with us and we are glad he was able to attend our last meeting.

J. Lloyd Wayne, 3d, '96, *Secretary-Treasurer*, Indiana Bell Telephone Co., N. Y. and Meridian Streets, Indianapolis, Ind.

Washington Society of the Massachusetts Institute of Technology

A speaker luncheon was held at the University Club on Friday, March 13, with about forty in attendance. The speaker, Mr. E. C. LaRue, of Los Angeles, told in a most interesting manner of the problems of the Colorado River.

The interest in the Club is shown by the fact that about one hundred men have paid their annual dues.

W. Malcolm Corse, '99, *Secretary*, 1901 Wyoming Avenue, Washington, D. C.

Technology Club of Rhode Island

The March meeting of the Technology Club of Rhode Island was held at the T. K. Club, Pawtucket, on the seventeenth. After a pleasing and enjoyable dinner, the members adjourned to the bowling alleys for the semi-annual tournament of the Club. At dinner, Bill Warren as self-appointed toastmaster, called on Thayer P. Gates, '02, as the oldest grad present for a short speech. Mr. Gates responded with a few well chosen words. Some vocal entertainment was also furnished by J. C. Nash, '20, and Norris G. Abbott, Jr., '20. On the alleys, Howard Fisher, '09, and Jim Finnie, '09, gave their usual finished exhibition. Their supremacy was greatly threatened by the phenomenal luck of A. C. Dickerman, '05. Some of the other members did not do so well but it is not fair to mention names.

L. E. Knowlton, '16, *Secretary*, Providence Gas Company, Turks Head Building, Providence, R. I.

Technology Club of Western Pennsylvania

Since the last note reporting the happenings of the Club, several events have taken place. The weekly luncheons are still being held Friday noons at 12:30 in the Chamber of Commerce Building dining hall. The attendance has been consanguineous if not large in numbers. It is hoped that visiting Alumni will not fail to join us at these luncheons whenever they are in Pittsburgh. It is also well known that George Ousler, '16, will stop construction long enough to welcome and suggest amusement to any transient Alumnus. He may be called or seen at the main offices of the Duquesne Light Company.

On the evening of February 11, the regular monthly smoker was held at the University Club. Our President, Dr. F. L. Bishop, '98, Dean of Engineering at the University of Pittsburgh, described to us the financial and architectural plans for the construction of the U. of P's great "Cathedral of Learning." This, as most everyone knows, is the college-word application of Billy Sunday's famous: "If you think I am stroking your cat's fur the wrong way, turn your damn cat around." Pitt has taken the M. I. T. buildings, turned them over on their side, and proposed a fifty-two-story skyscraper built to house a college of 12,000 students all under one roof. It's a new and magnificent plan, indicative of Pittsburgh's spirit of achievement, etc. . . . Incidentally, Dr. Bishop has been instrumental in its conception. The latter part of the evening was spent in the old custom of personal competition in cards.

The last smoker was held the evening of March 10 at the Faculty Club of the University of Pittsburgh, where we were the guests of Dr. Bishop. Amid the settings of a true old English Castle Hall we tried to remember that we were still living in the Twentieth Century. However, the food and conversation made the illusion almost impossible. Dr. James F. Norris of the Department of Chemistry at Technology dropped in and entertained us with a number of subjects. His depiction of things and conditions at the Institute was of great interest to those of us who have not been there in the past few years. We enjoyed his presence very much. The meeting terminated again in the pursuit of personal honors. Those who fail to attend these meetings are missing a great deal (and this in more sense than one).

A special luncheon was held Tuesday noon, March 24, at the Chamber of Commerce Building. This time the treat consisted of none other than Orville B. Denison himself. He looked fresh and

plump as if spreading news of interest and managing alumni affairs was doing him good. About thirty were present and the genial ease with which the dinner was consumed, to the accompaniment of Dennie's sprightly stories, gave us the feeling of the successful host. After the lunch we adjourned to see the movies which the Class of 1924 took. These were very interesting and were well illustrated by Dennie. The class habit of taking movies has much to recommend it.

Dennie visited several men in the Pittsburgh district among whom might be mentioned Mr. and Mrs. Bunny Wilson. Though short, Dennie's stay was as pleasant and profitable as it always is.

The members of this Club were greatly sorrowed as were all those who knew of the death of Frederick Crabtree, '89, Head of the Department of Mining and Metallurgical Engineering at Carnegie Institute of Technology. His death is a great loss to the field in which he was a distinct leader, to Carnegie Tech, and to all of us who knew him. In devotion to these interests he actually sacrificed himself and his death was largely brought on by overwork. Great sympathy is felt for his family and friends.

We are looking forward to the Five-Year Reunion in Cambridge in June and also to our annual banquet. More of which later.

Forrest G. Harmon, *Secretary Pro-tem*, 1802 Frick Building, Pittsburgh, Pa.

Rocky Mountain Technology Club

In addition to its weekly luncheons held in conjunction with the Engineering Council in Denver, the Club had a Ladies' Night on March 13. It was a very pleasant sociable evening and we all enjoyed a concert by Paul Whiteman.

We plan a picnic in the early summer and are counting on getting out a large number of our Tech family. It would be particularly fine if we might have some visitor from Tech with us on that occasion.

Harold O. Bosworth, '02, *Secretary-Treasurer*, Denver Fire Clay Co., 1744 Champa Street, Denver, Colo.

New Haven County Technology Club

The annual social event of the Club was held Saturday evening, March 7. It was in the form of a dance and card party held at the New Haven Lawn Club. About seventy-five couples, members and their friends, were present. A very enjoyable time was spent.

W. H. Whitcomb, '03, *Secretary*, Box 606, New Haven, Conn.

Technology Club of Kentucky

The last monthly meeting of the Technology Club of Kentucky was held on March 10, as usual, at the Hotel Henry Watterson. There were twelve Tech men present including Calvin W. Rice, '90, Secretary of the American Society of Mechanical Engineers, who was our guest. He had just come back from South America and gave us an exceedingly interesting account of conditions there. During the past year the Club has held monthly luncheons with quite good attendance considering the number of Tech men living in this locality. We are planning to have our annual dinner some time during the last week in April and are working now on several features which we believe will be interesting. We would most certainly appreciate it if any Tech men passing through Louisville would call on us.

Archie P. Cochran, '20, *Secretary-Treasurer*, U. S. Foil Company, Louisville, Ky.

Technology Club of Philadelphia

Included in our membership at the present time is Hobart O. Davidson, '20. Anyone who attended the Institute during the school year of 1919-20 will remember this gentleman. Davy is located with the Viscose Company in Chester, Pa. At the present time, he is very much absorbed in a new occupation — the entertainment of a new daughter. We all welcome Davidson as a member of the Technology Club of Philadelphia.

Since the notes for the month of February were sent in to The Review, the Club has not had a meeting. A dance was held February 20, which has been duly accounted for in the previous issue. It was then thought advisable not to hold another meeting until early in April.

The next meeting is being arranged for by Jerome G. Harrison, '06. Nothing definite as yet has been decided upon, but there will be a notice in the near future.

The luncheons have been held as usual at Wanamaker's Tea Room every Thursday at 12:30 p.m. The attendance at these affairs has been unusually good. All those who attend regularly look forward to the day.

It is the aim of the Club to welcome all Tech men in the vicinity, whether transient or residents, to all meetings and luncheons.

H. Arthur Grosscup, '20, *Secretary*, Fifth and Race Streets, Philadelphia, Pa.

Technology Club of Cincinnati

The versatile Mr. Denison was the guest of the Club at dinner on March 26. The "added attraction" brought out forty-one men who enjoyed a good dinner and a very enthusiastic and interesting meeting. Dennie gave us a snappy summary of the latest Tech news. The 1924 moving pictures were run off and were very much enjoyed. The pre-Cambridge grad surely gets a very vivid picture of the Tech of today from the film.

The Scholarship Committee of the Club reported that the money for a scholarship next year is assured. It is hoped to get a small subscription from practically every Tech man in our district, and thus to make the scholarship a real expression of the interest and loyalty of the Cincinnati Alumni. The scholarship will have a value of \$350.00 and will be known as the "Richard Warren Proctor Scholarship." It will be awarded next year to a Freshman entering in a regular course.

The next problem before the Scholarship Committee is the selection of a candidate for the scholarship. To that end, the superintendents and principals of the local high schools were invited to the dinner. All of the school principals expressed great interest in the scholarship, and made constructive suggestions as to the problem of making the award.

Fred W. Morrill, '07, *Secretary*,
5713 Valley View Avenue, Cincinnati, Ohio.

Dayton Technology Association

Thirty-two members of the Club assisted and entertained by Dennie held a most successful annual dinner and election of officers on March 25, 1925 at the Engineers' Club of Dayton.

Dennie had timed his spring visit to the Middle West to include this dinner on his schedule, so that our business meeting and election of officers was a short, snappy affair that filled a gap between courses, and the musical numbers designed, executed, produced, and rendered by our guest, the Secretary.

Past President W. G. Wuichet, presented the names of E. C. Wells for President, Lieut. Robert E. Robillard for Vice-President, and strongly recommended that C. H. Spiehler, '08, continue to hold the office of Secretary-Treasurer on the plea that he was the only one to hold that office in the history of the organization that had ever reported a surplus.

Discussion was exceedingly brief as most of the members wanted to hear Dennie give some more vocal and instrumental entertainment, so Eugene T. Barney, retiring President, instructed the Secretary to cast one ballot electing the whole ticket and turned over the affairs of the Club to incoming President Wells.

C. H. Spiehler, '08, *Secretary-Treasurer*,
Dayton Power and Light Company, Dayton, Ohio.

Technology Association of Northern California

At a regular March meeting of the Association on March 24, Ray J. Barber, '05, told a large crowd of the boys about recent developments in automotive engineering, discussing four wheel brakes, balloon tires, superchargers and other new developments. Mr. Barber has been connected for the last few years with the Eight Wheel Motor Vehicle Company in the design of an eight-wheel bus and motor truck, which is now in the process of manufacture. He has also worked on the development of an ink for a multicolor printing process for the Winship Estate of San Francisco.

This was our last chance to meet Ray as a member of our Association as he is leaving for Boston next month to open a consulting office. Many more of us would like to accompany him if only to stay until June 12.

Archie L. Mock, '21, *Secretary*,
664 Howard Street, San Francisco, Calif.

The M. I. T. Alumni Association of Cleveland

The Association is proud to have a new corrected membership list of 207 names of Tech Men who are living in or around Cleveland. The following Committees are being arranged according to the lately adopted constitution: Entertainment, Employment, Publicity, Membership, Music, Student and Athletics. These will serve to organize the Club for the coming year.

By the time this notice goes to press we shall have had our first Cleveland meeting of the year. On Saturday, April 4, the Association held a dinner meeting at the University Club. There was a double attraction. First we heard about our new Union Depot by a man well qualified to tell us the plans. The speaker was Mr. Henry D. Jouett, '00, Chief Engineer of the Cleveland Union Terminals Company; second, Orville B. Denison, '11, the Alumni Secretary, was with us and gave us first hand information about the Institute and its activities during the current year.

A. Ilsley Bradley, '21, *Secretary*,
2039 East 107th Street, Cleveland, Ohio.

Technology Club of Hartford

The arrangements for the Hartford performance of Tech Show 1925 were in the hands of the Secretary of the Club, and the financial results were far in excess of the preceding years that the Show has been in Hartford. We quote the *Hartford Courant*:

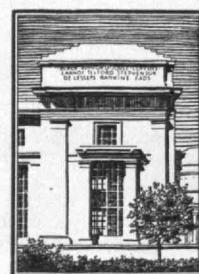
"Since the Tech Show a year ago some people in Hartford have not laughed with any greater joy in the theater than they did last evening, also at a Tech Show. For the 'girls' were as funny as ever and they danced just the same, even down to the rouge spots on their dear little knees; and the voices were as ever. Jacob was on the job vocally no matter if Lady Esau was handing out a line of beauty and grace in skirts."

"That the Tech boys this year are under the direction of a professional girl showman, Ned Wayburn, no less, was evident from the way the various dances were arranged and the manner of the chorus exits and entrances, but Ned, with all his skill, even were he the very old Ned himself, could not make that crowd of husky youths dance and sing like any girls that ever tripped the boards; and a very good thing indeed that he could not for had the illusion of femininity been any better, the show would not have been half the fun. The better a female impersonator is, the worse he is."

"There is a very marked story in the present Tech Show that was played last evening at Parsons' under the name "The Duchess of Broadway" and Roger Ward, '25, the author of the book, may rest well, feeling that he has achieved a musical show plot that certainly is no more farfetched than many another and that is much better than some."

"Some of the players last evening were in last year's show, but the merits of all should be judged on present performances not past. Rand B. Jones, '28, played the name part very effectively. He had excellent make-up, used his eyes and his expressive countenance well and walked with a very considerable grace. Willard F. McCormack, '26, was a buxom scream as the inn-proprietor and his dancing was joyous; Richard Whiting, '27, played the comedy hero very neatly and expertly and the other principals were up to their work. The chorus should be seen to be appreciated and the big orchestra and the jazz-band specialists who stopped the show in the second act did their work admirably and with immense spirit. Nor should the acrobatic dancing of the graceful Harlequin and the Columbine of the climbing jeans be forgotten, nor yet the artists who acted as barkers and sold the 'song-hits' of the piece in most approved professional and Tin Pan Alley manner. It was a great night for Tech and a very pleasant one for Tech's friends in the audience."

G. W. Baker, '92, *Secretary*,
Box 983, Hartford, Conn.



NEWS FROM THE CLASSES

News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose Secretaries have guaranteed the appearance of notes in every issue. These classes are: 1895, 1896, 1900, 1901, 1902, 1905, 1907, 1910, 1911, 1912, 1914, 1915, 1916, 1917, 1918, 1919, 1921, 1922, 1923, and 1924. Other classes adhere to the alternate schedule. Due to strict limitation of space, The Review is unable to publish lists of address changes of members of the Association. The Alumni Office, in Room 3-200 M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the Association in its care.

'68

The Secretary regrets to report the death of two of our classmates, Eli Forbes, whose death occurred on February 25 and John Peck on February 27. In connection with the death of the former, the Secretary is reminded of Eli Forbes's recounting to him that on January 1, 1865, he walked into the office of President William Barton Rogers and entered his name as a student of Massachusetts Institute of Technology. He was the first student to enter the first Class — '68. As a student he did his work well and was graduated in good standing. He joined in the games of cards, football and baseball which were the chief sources of sport in that day. The baseball diamond game was originated in Boston during his days at the Institute. He attended the old Tremont Gymnasium and was especially associated with Whitney Conant and the Secretary. The three developed themselves in a muscular way and became rather good at doing hand-springs and somersaults. They had pictures taken of themselves in spectacular groups, by which to remember their gymnasium days.

The following notice regarding his death appeared in the *Marlboro* (Mass.) *Enterprise*: "Eli Forbes died from pneumonia at his home in Lancaster on February 25. He was seventy-six years old, and was prominently connected with the Lancaster Mills in Clinton besides holding the office of President of the Clinton Savings Bank."

"Mr. Forbes was born in Lowell, the son of Mr. and Mrs. Franklin (Cushing) Forbes. At the age of two he was brought to Clinton, where his father had accepted a position as agent of the Lancaster Mills. Attending the Clinton public schools, he concluded his education at the Massachusetts Institute of Technology, graduating in the first Class with a degree in 'Science and Literature.'

"He became connected with the Lancaster Mills, having charge of the dyeing department. After concluding his services at the mill, Mr. Forbes entered the banking business. He served as clerk of the Clinton Hospital Association and was a past President of the Runaway Brook Golf Club. He was also affiliated with the Lancastrian Club."

The *Nyack* (N. Y.) *Journal* of March 4 had the following account of the death of John Peck: "John Peck, who was born September 5, 1847, in 'Samsondale,' Haverstraw, died on February 27, in his 78th year. Mr. Peck was a descendant of a long line of industrial engineers. His great grandfather, John Peck of Boston, was given recognition by Congress as the greatest shipbuilder of his time. His grandfather, Elisha Peck, founded The Samsondale Iron Works in 1832, being one of the first manufacturers of this country and also the first President of the New York, New Haven and Hartford Railroad.

"John Peck was prominently interested in the manufacture of brick for the past forty years and was manager of the Garner Brick Works since 1895. He was the first brick manufacturer in the Hudson River Valley to use steam in the drying of brick and was the inventor and patentee of a process of burning brick by a combination of fuel oil and coal. Until the time of his death, he was a director and a member of the executive committee of the Greater New York Brick Company, where he will be greatly missed.

"Mr. Peck was the son of John Peck and Louisa Gordon Peck. He was a graduate of Columbia University and the Massachusetts Institute of Technology."

Robert H. Richards, *Secretary*,
Carter Hall, Warrenton, Va.

'74

The following notes were prepared for the March issue of The Review but through some misunderstanding they were received too late for insertion and are given here for what they may be worth.

Class of '74 was represented at the Alumni Dinner of January 3 by two of the Class officers, Messrs. Barrus and Chase. The post-prandial exercises were of unusual interest to the former, owing to his association years ago with the principal speaker of the evening, Mr. Vauclain. In the early days of the compound locomotive, Mr. Vauclain, who was at that time superintendent of the Baldwin Locomotive Works, invented the compound type of locomotive which bore his name, and he honored our Class, and Technology as well, by selecting Classmate Barrus to conduct a series of road tests on

his new engine, to demonstrate its superior advantages. The engine was running on the Baltimore and Ohio railroad drawing the fast express train between the cities of Philadelphia and Washington. For the purposes of the tests four complete round trips were made on successive days with the new engine in regular service, and the necessary test-data taken. Then one of the Standard type Baldwin engines was substituted and four similar round trips were made with the old type engine. Altogether on these tests some 3000 miles of travel were covered, with Barrus at his observation post on the engine pilot.

Russ is fast progressing on his trip around the World. He has favored us with post-cards mailed from Los Angeles, Honolulu, and Japan.—An interesting letter from Hamilton, who writes from Glendale, Calif., reads in part as follows: "Well, here I am back in Sunny California for the rest of my life. I do not like the wet climate of Western Oregon as I am bothered a good deal with bronchitis.

"I arrived here by steamer from Portland on the eleventh and feel better already. I am in one of the most beautiful places I have ever seen. It joins Los Angeles on the north and is only seven miles from the business heart of the city. Its population in 1910 was 27,42, in 1920, 13,356, in 1922, 35,000, in 1924, 50,000. It is still growing fast. It is said to be the fastest growing city in the United States. The air here is very healthful—dry and invigorating. One always wants a blanket at night in the hottest part of the summer.

"The steamer I came down on stopped over one day in San Francisco and I hunted up Holbrook while there. It had been fifty-one years since I had seen him. He knew I was coming but he did not know just when. So when I called at his office, he did not know me and when I told him who I was, he said, 'You are about twice as big as he was.' He is troubled by sciatica just now. He bears his years well, as he is now in the last half of his seventy-fifth year. He is a fine man and I always considered him one of the ablest men in the Class."

"Frank Jackson is in Los Angeles, where he has been for many years and I am going to hunt him up this week. Coming down by steamer I had to go through Los Angeles to get here but did not stop and have been so busy here getting settled and looking over this place that I have not been in to the city since I came here."

Barrus reports that he has been commissioned to make a thorough examination of the steam plant of the Oxford Paper Company, Rumford Falls, Maine, with a view to improvements. This mill is one of the largest in the country. It operates thirteen paper machines, a sulphite mill and a soda mill, requiring twenty-seven boilers and thirteen engines.

There will be a class lunch early in April, and another in June about the time of the All-Technology Reunion which is scheduled for June 11 and 12. The Secretary hopes that on the latter occasion the Reunion will attract a large attendance of '74 men.

Charles French Read, *Secretary*,
Old State House, Boston, Mass.

'76

The Secretary has recently received news that Mr. George Louis Lavery, Secretary and General Manager of the Tire and Rim Association of America, died on January 11. Mr. Lavery was born in Boston in 1856. In 1885 he went to Chicago as manager of the office of the Yale & Towne Mfg. Company. Later he organized the American Post Office Equipment Company. About ten years ago he became associated with the West Steel Castings Company of Cleveland, and in 1922 became General Manager of the Tire and Rim Association of America of which he was appointed secretary.

John R. Freeman, *Secretary*,
815 Grosvenor Bldg., Providence, R. I.

'84

C. B. Emerson writes from Adventure Cabin, Los Gatos, Calif., that he expects to leave San Francisco for Amapala, Honduras, about May 1, "for a hike through that land of revolutions, snakes, wildcats" and so on.

Members of the Class will learn with deep regret of the death of Henry D. Hooker for whom the following notice has been obtained from a near relative:

1884 Continued

"Henry Daggett Hooker was born April 14, 1859, in Providence, R. I., the son of Commander Edward Hooker, U. S. N., and Esther Ann Battey. His boyhood was spent in Providence and at various places where his father was stationed, in Nagasaki, Japan; League Island Navy Yard, Philadelphia; Brooklyn Navy Yard, etc. Hooker entered the Massachusetts Institute of Technology with the Class of 1884, becoming Assistant in Architecture to Professor Ware. He did not complete the course, leaving in 1882, when Professor Ware left. He was associated with several architectural firms in New York City until 1911, when he was appointed assistant architect and later architect of the New York, New Haven and Hartford Railroad. He retired in 1921.

"In 1886, Hooker married Mary Theodora Davenport, daughter of Julius Davenport and Mary Ann Bates, in Brooklyn, N. Y. They had two sons, Davenport and Henry Daggett, Jr. Both sons were graduated from Yale and later received the degrees of Ph.D. from the same university. Davenport Hooker is Professor of Anatomy in the University of Pittsburgh, School of Medicine. Henry Daggett Hooker, Jr., is Associate Professor of Horticulture at the University of Missouri.

"Hooker died on December 16, 1924, at the Hospital of the Rockefeller Institute in New York City, of pneumonia, after a very brief illness. He is survived by his wife and sons."

Harry W. Tyler, *Secretary,*
Room 2-261, M. I. T., Cambridge, Mass.

'86

The *Berkeley (California) Gazette* of February 4 contains a notice of the sudden death in that city of H. H. Plummer, a member of the Class and who for many years had been at the head of the H. H. Plummer Company, of San Francisco. This firm, which had an international reputation, specialized in veneer and wood-working machinery. The sympathy of the Class goes out to his bereaved family.

The Class mourns the passing of another classmate, Arthur H. Brown of Lynn. Formerly in the employ of the Thomson Houston Company, he contracted yellow fever while travelling in South America and never fully recovered. A severe attack of the grippe was the immediate cause of his death on January 28.

News has just reached the Secretary of the marriage on February 21, of B. C. Batcheller to Miss Louise Perkins at Rutland, Vt. Mr. and Mrs. Batcheller are now travelling in Europe. After their return late in the coming summer they are to be at home in Wallingford, Vt.

A very interesting and readable paper from the pen of Dr. Alice G. Bryant on the "Value of Lip-Reading and Voice-Training in the Education of the Hard of Hearing" was presented at a recent meeting of the National Education Association in Washington.

Arthur G. Robbins, *Secretary,*
Room 1-270, M. I. T., Cambridge, Mass.

'88

All secretaries are urging their classmates to attend the big All-Technology Reunion to be held June 11 and 12. Saturday, June 13, is left free for class reunions and while nothing definite has yet been planned, something worth while will be provided.

It is impossible for the Secretary to keep in close touch with all the members of the Class. He has recently received an unverified report of the death of Ambrose P. Gaines of Chattanooga, Tenn., on September 1, 1920. Gaines took Course III and was connected with the Tennessee Coal, Iron and Railroad Company as Chemist, and later as Superintendent. He had been General Superintendent of the Southern Iron Company at Warner, Tenn., and at one time was General Manager of the Jefferson Iron Company of Jefferson, Texas.

Charles L. Holmes of Waterbury, Conn., took motion picture records, especially as to the shadow bands, during the recent eclipse.

B. R. T. Collins, one of the most enthusiastic golfers in our Class, is Treasurer of the Great Chebeague Golf Club, located on the island of that name in Casco Bay, Maine. He reports a most successful season in 1924 with many improvements in the nine-hole course from which the sea and the White Mountains can be viewed from nearly every tee, green and fairway. Unlike many clubs, the balance sheet shows a surplus of \$6,353.50. B. R. T. has reason to be proud of his little club.

The Secretary has recently sent out copies of the Class Record.

William G. Snow, *Secretary,*
112 Water Street, Boston, Mass.

'90

Allan H. Rogers spoke on March 9 before the Mining Society at Tech, on Mining Experiences in Latin America. Allan has only recently returned from a trip to South America. After leaving Technology, he was with the American Smelting & Refining Company in Mexico until 1908. He is now in independent practice with the firm of Rogers, Mayer & Ball. Allan travels all over the world on consulting jobs, but hopes to be with us in June, and bring Mrs. Rogers with him. He is President of the Swedish-American Prospecting Company, which has the electrical prospecting rights in this country.

John O. DeWolf, with Mrs. DeWolf, left for a five or six weeks trip early in March to California. It is on business he has gone, but all the time will not be devoted to that calling. They will both be back for our June Reunion.—Fred Dodge spent January and February in Florida. We presume Fred is practicing up on his golf, and if Mrs. Dodge does not take him abroad, we will have them with us in June for our Reunion.

Our Class President, Charles Hayden, left early in February on his annual inspection trip to Cuba, as Chairman of the Board of the Cuba Cane Sugar Corporation. Early in March, he sailed on the *Aquitania*, for a two-month vacation and yachting trip along the Mediterranean, visiting the northern coast of Africa, going up the Nile, then to Palestine, Bagdad, Constantinople, Athens and Rome. We are waiting to hear of his return to be with us in June.

We regret to report that Atherton Loring's summer home at Kingston was burned on February 3. Those of you who attended our Reunion in 1916 on the Cape, will recall that we spent several delightful hours at this beautiful place. We had hoped to have the opportunity again this year, but it certainly looks doubtful at present.

Occasional letters have been received from J. K. Noyes, from Binghamton, N. Y. Jake is taking up the work of securing subscribers to various weekly and monthly periodicals, and will be pleased to hear from any of you who desire anything special.

Out of the one hundred and eighty odd notices sent out the first of January, only about half came across with any reply relative to our Thirty-fifth Anniversary Reunion in June. A second and final notice to the delinquents was mailed the middle of March. The only notices that will be sent from now on, will be to those who have replied favorably. We are glad to report that about forty of the men expect to be present, and that about half of them will bring their wives.

Following the big Alumni Reunion, June 11 and 12, our plan is to meet Saturday noon, June 13, at 1:30 p.m. at Walker Memorial. Machines will be there (and not all flitters) to take us over the wonderful drive through the Parkway, Milton, Quincy, to Plymouth, and then on down the Cape to Osterville, where we have been so fortunate as to have the East Bay Lodge reserved for us.

This is a delightful location, right on the shore. Bathing, golf, and tennis, so come prepared for your favorite sport. We shall remain here over Sunday and Monday, the 14th and 15th, and return to Boston on Tuesday morning, the 16th.

By good fortune that is the week when the Pageant of the Revolution and Birth of Independence is held on the outdoor stage among the trees at Lexington, only eleven miles out from Boston. Seats will be reserved for Tuesday evening, June 16, for all who can attend, and we feel sure that it will make a most enjoyable windup for our Reunion.

Now, fellows, you can see that we are to have a grand time, but even if you cannot come, for Heaven's sake get busy and for once reply to your Secretary's notice.

George L. Gilmore, *Secretary,*
Lexington, Mass.

'92

No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the May issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in the Review Office. Members of the Class having news or inquiries should address them to John W. Hall, Secretary, 8 Hillside Street, Roxbury, Mass.

'94

Notwithstanding the fact that the Class had its big Reunion last year, the General Reunion which is to take place in June will give the members of '94 another opportunity to gather for some kind of festivity. A local committee will shortly convene to discuss possibilities for a '94 day so that those who attend the General Reunion on June 11 and 12 may have an opportunity to foregather with their classmates for a short time at least. Since the General Reunion will come on Thursday and Friday, June 11 and 12, it may be possible for '94 to have a special day on Saturday or even to extend the period through the following day. Whether the celebration should take the form of a class picnic or a day on some of the golf courses hereabouts, or a motor trip into the suburbs or to some of the shore resorts, is not yet fully decided, but those of you who read these lines may expect a notice of some kind within the next few weeks. Therefore, plan to attend the Reunion and to extend your stay over Saturday and Sunday. We can at least assure you that a class dinner will be held on Saturday, June 13. Incidentally, the Secretary will be glad to receive suggestions from any who have special desires as to the form of Class Reunion which would be most acceptable.

Among the publications which have come to the Secretary's desk during the past few weeks is one from the Smithsonian Institution dealing with The Provisional Solar-Constant Values over the period of 1920 to 1924 by C. G. Abbot and his colleagues. If Abbot is not in South America, California or Northern Africa during the coming

1894 Continued

summer we may hope that he may be here for the Reunion in June and perhaps would be willing to tell us something about the behavior of the sun of which he has been a very thorough student for many years.

McJennett, who is as difficult to keep track of as the proverbial flea, is reported to be a practicing physician at 147 Elm Avenue, Mt. Vernon, N. Y. The Secretary proposes to check up on him by calling for treatment the next time he goes to the Big City and has leisure enough to make the trip to the suburbs.—Ned Marvell has moved his office from 57 No. Main Street, Fall River, to 209 Bedford Street, in the same city, where he is engaged as mill engineer and architect.—Mead is now President of the Deep Water Coal and Iron Corporation at Jasper, Ala.—W. R. Miller is practicing architecture at the Fidelity Bldg., Portland, Maine.—Leslie Moore has added a degree in law to that of science, although he is still serving as the inspector of gas for the Commonwealth of Massachusetts.—R. G. Morse is the President of the Boston Scale & Machine Company in this city.—Peet is the President of Peet & Powers, Inc., 70 East 45th Street, New York City.—H. S. Reynolds is Vice-President of the Appalachian Power Company with office at 31 Nassau Street, New York City.—Tom Richards has come part way back from the Far West and is now Vice-President and General Manager of the Rubber Products Company at Barberton, Ohio.

Henry Ripley, reported as Treasurer of the Kinderhook Knitted Cap Company, still maintains his office at 133 Essex Street, Boston.—After a seclusion of several years, Savage has been located as superintendent of marine construction of the Hudson River Day Line in New York City, while Whiton is marine superintendent of the same company.—Woollett is practicing architecture in Hollywood, where he is no doubt constructing palaces for the movie stars.—Shurtleff recently lectured at the Institute on town planning. He has also been somewhat in the public prints in connection with some splendid designs for landscaping in the vicinity of Boston.—B. E. Holden is architect for the American Red Cross in Paris, France (not Kentucky), while his brother is practicing architecture in New York City.—Horton is the chief sanitary engineer in the Department of State Engineers at Albany.—A. F. Hunt is the President of a company with a long Spanish name in the Dominican Republic, but can be reached by writing c/o Moore & Company, Pemberton Building, Boston. E. M. Hunt is Commissioner of Public Works and City Engineer, Portland, Maine.—A large number of members of the Class seem to have neglected to send in recent addresses to the Alumni Office, as the new Register of Former Students indicates. Without having tabulated the statistics, it is also evident that '94 has suffered heavily by death of members.

The Secretary is, of course, all puffed up over being nominated Second Vice-President of the Alumni Association, but wishes to take this means of disclaiming that any pressure was brought to bear with the nominating committee.

Samuel C. Prescott, *Secretary*,
Room 10-405, M. I. T., Cambridge, Mass.

'95

A fund is being raised for the Thirtieth Reunion of not less than three thousand dollars toward which a part has already been pledged. Any members of the Class who desire to contribute will please notify the Secretary.

Frank Sias' "Siren" and Yoder's "Yodel" will be heard on June 11. Zizz will be the order of the day. Ninety-five is going strong on the All-Technology program, with the President of the Alumni Association, the Chairman of the Entertainment Committee, the Grand High Publicist and such a number of smaller doggies tagging along on the leash, members of the Class.

Yoder is back in the old Bay State! If you knew Yoder, and most of us did, you will enjoy reading this letter received from him:

"It has been many years since I have contributed a personal to your Technology Review letter, and it may appear that I have forgotten you entirely. Quite to the contrary.

"I have long been a resident in the semi-west at Pittsburgh, residing there for twenty-three years, where I was connected in several capacities with the Jones & Laughlin Steel Corporation. I resigned from that organization October 31, 1924, after a strenuously organized life of twenty-three years, and took advantage of a long-needed vacation of about three months.

"After careful consideration I sought a new location where I could enjoy in my old days a section of God's good country and fresh air and have assumed the duties of manager of the Chandler Machine Company at Ayer, Mass.

"I am developing into an expert at embellishing ladies' garments as we manufacture a full line of plaiting, fluting, and pinking machines, which are world-famed from Paris, France, to Sydney, Australia, and from New York to San Francisco.

"If you are in line for any particular type and style of covered buttons, I can teach you the trick to rejuvenate the madam's wardrobe for a very slight expenditure.

"We also manufacture the world's greatest roller bearing for shafting, and if at any time you want to turn over without friction, call on me, as I have the recipe.

"I am glad to be near my old stamping grounds, and will call on you at my first opportunity when in Boston. I hope to see you at the Reunion next June if not before, and in the meantime, give my warmest regards to all the fellows as you see them."

Robert M. McBride & Company publish "A Book on Entertainments" by Helena Smith Dayton and Louise Bascom Barratt. The following quotations will be appreciated by those who have to do with the coming Reunion:

"The cynical will say that this is a form of mania encouraged by colleges for the purpose of increasing endowment and getting free publicity, but the fact remains that there is something inspiring about a really good Reunion. For the time being at least some of the worldliness of the years sloughs off and there is a return to the buoyant ideals of youth. The sight of quiet men or women of real achievement burns away personal egotism and brings forth a certain self-communion that is harmful to no one now and then.

"The success of a Reunion is due to a tireless chairman and a good class organization. The latter depends largely on the loyalty and verve of class officers, although in recent years colleges and schools have been so exacting in the matter of records that even most lax secretaries have been forced to keep in some sort of touch with their classmates.

"The class record is the first thing the chairman should secure upon entering office. The next possession to be treasured is an old list of commencement festivities. The following step is to appoint as a committed member a classmate who lives in or near the college town in order that many details such as class dinner, conferences with alumni secretary, etc., may be personally arranged.

"At least eight months before Commencement the chairman should begin his work. The first job is to compose a bright, peppy letter to all classmates reminding them that Reunion is drawing near and begging them not to have any babies or business that will prevent a big get-together crowd in June. Incidentally, suggestions are requested and ideas that will help to make the coming Reunion a real event. In response from a class of two hundred and eighty-three will come two post cards congratulating the chairman on his snap and one letter saying that the class used to be a dignified organization and that the writer wishes it understood that he considers it deplorable that such a slangy, jazzy epistle should be sent out on class stationery. It might as well be understood early as late that he for one will not attend any Reunion run in such a frivolous manner. Two weeks later some one else will write to say, 'Please don't make us carry parasols.'

"Meantime, the chairman carefully perusing class names makes a list of useful people under the headings: 1. Singers. 2. Writers. 3. Speakers. 4. Persons with histrionic ability. 5. Dancers. 6. Composers. 7. Artists. 8. Printers' relatives. 9. Plodders willing to work. 10. Especially distinguished. Names are also grouped according to geographical sections, for it is always of assistance if there are eight persons living in Atlanta who will get together and furnish some idea and stunt. By stirring up different sections it is possible to pit one against another for suggestions and material of various kinds. For instance, it is helpful to write San Francisco, 'Chicago has sent in the best song to date. Can't you go 'em one better?' Where a class is fairly prosperous or a chairman has a generous pocket book, results are sometimes obtained by telegram when letters fail. An old superstition has been built up about yellow-backed messages brought by a boy in blue that they are important and it is probable that they will always be more reverenced because of this unaccountable impression.

"Arranging for songs should be one of the earliest duties of the director of Reunion. He should decide how many marching, topical and serenade songs will be required and set about getting them. If the class is rich in composers, the writers are instructed what to furnish in the way of lyrics and the composers are put to work. Where there are no composers the chairman will obtain the best result by personally selecting the music and mailing it to the writers to fit with words. If this is not done, seven authors will send seven songs to 'Auld Lang Syne' and five to 'The Flowers That Bloom In The Spring.' Certain additional songs are always written after the class actually reaches the campus. At a Reunion which was nothing but a weary downpour of rain one class achieved many chuckles by a hastily written song to the effect that though the states were dry the college still was wet. It is wiser, however, not to wait till the last moment for marching and serenade songs which presumably should have more merit and technique than a spur-of-the-moment giggle.

"If class instrumental music is desired a sub-chairman should be appointed to stir up mandolin and guitar players and the music should of course be sent them. A song and cheer leader with a good voice and pleasing personality should next be selected and copies of the music mailed him also. It is growing more or less customary, particularly among women's colleges, for local sections of a class to hold annual or semi-annual luncheons on a given day. If it is possible to send copies of the songs to these groups so that there may be a few rehearsals of the words before returning to college something is gained, although this is by no means imperative.

1895 Continued

"Meantime, the chairman studies the old list of Commencement festivities. Sometimes the program is available for the coming year, but in general this seldom materializes until three months before the actual date and the wide-awake chairman should have made many plans before then. The value of the old program is that it gives an idea of the more or less prescribed events and the hours which are unfilled. The wise chairman will see to it that every one of these vacant hours is scheduled for some activity. When he cannot do anything else he should arrange a Cook's tour of the Campus conducted by the wittiest person in the class.

"Graduates talk about going back to dear old Alma Mater to be with Sal or Bill, but as a matter of fact a classmate's life history is available in twenty minutes' conversation and after that, one-time inseparables are bored to tears with each other. The other fellow is interested to know whether his vis-a-vis has children or dogs and how many of each; whether he has been divorced; whether he married the flame of last accounts; and what his present business is. When it comes to what Willie said to his teacher, one's yearly salary in flat figures, and a list of one's acquaintances in the Four Hundred it is unnecessary to furnish the listener with ear mufflers. His face may smile, but he hears nothing. A busy Reunion with the crowd doing things together will result in everybody returning home telling how wonderful the old classmates are. A quiet Reunion where, 'we'll just talk over old times' is the motto, sends everybody away firm in the belief that the old crowd has turned into a bunch of pests.

"It might be said in this connection that chairmen should frown upon the ever-growing habit of classmates returning encumbered by their families. This defeats the very purpose of Reunion. College houses cannot accommodate these aliens and they not only make Reunions difficult but exasperating. Where women come attended by husbands they are not available for certain occasions because Henry wants to motor that evening or is willing to buy a rug for the dining room if it is chosen on that day of all the three hundred and sixty-five in the year. Where men return with wives and youngsters they spoil other men's fun and their own. It is impossible to enter whole-heartedly into college spirit with allegiance divided. The family is a part of the life since graduation and it is the very thing which should be forgotten temporarily in order to get the best out of the event. Chairmen's letters, therefore, should discourage the attendance of any but bona fide graduates or honorary class members such as the class baby who always receives a special invitation to be present at all class ceremonies. Better halves should have pride and sense enough not to tag along on these occasions.

"The chairman next decides where the class dinner is to be given and sets about getting estimates, sample menus and prices per hundred, two hundred or whatever number he anticipates from statistics of former Reunions. This task is best attended to by the committee member on the spot. It should be remembered that a Reunion is an extravagance for many and therefore the most costly selections should not be made although the best possible accommodations should be arranged for the price. The class dinner is perhaps the most important function for Reunion because many appear for that who are unable to attend other commencement festivities. It should, therefore, be memorable. The location will depend on whether dramatics are introduced or straight speeches only. In the former case it will be necessary to engage a gymnasium or room with a stage and an early selection is necessary in order to beat the other fellow. In general, the event should be scheduled for the college towns. There is no sense dragging people across the continent to the dear old college and then rushing them fifty or a hundred miles farther in order to eat in a more handsome hotel.

"Compare notes with the general reunion chairman to make sure that the class decorations, insignia, etc., are in reasonable harmony with the other classes; see that the class editor gets letters, statistics and other material from the scattered classmates; get estimates on printing for tickets, forms, etc., and see that the class artist gets out placards, posters, place cards, etc.

"The early letters should be alluring without divulging actual plans. A month before Commencement the final letter should be mailed. This gives the authentic dates of various Commencement and Reunion festivities. . . . Most important of all the address of the class headquarters at the college should be given. When replies to these questions are in, a definite order may be given the hotel or caterer for one hundred and eighty or whatever the number may be for the class dinner. It should be understood that the number may be augmented on the day of the dinner by telephoning up to a certain hour. Even then it is well to engage food for at least fifteen who do not order, as approximately this number will drop in at the last moment. The number who will be present for the entire Reunion will give an idea how much is to be ordered in the way of insignia. In cases where Alumni from points south and west want to catch a certain boat or train it is well for the chairman to disseminate all the information available about cost of transportation, schedules, etc., but he should never engage to buy tickets or he will find himself in a hole. Prospective purchasers should buy directly from the ticket agents. This saves many complications and much bad feeling later.

"Where the chairman must hunt accommodations, he should send out notices that so many rooms are available at such and such places and the prices are thus and so. The individuals should make their own reservations, for the chairman will have enough money to handle without being muddled by looking after sums for classmates. Where classes have money in the treasury, bills may be paid as they come due by requisitions on the class treasurer. If the class is in financial straits, bills should either be held for payment until all moneys for Reunion are in or else costs should be underwritten by the chairman or others and so defray obligations. The financial success of a Reunion depends largely on the arithmetical prowess of a chairman. He should not only calculate expenses accurately, but add enough overhead so that all emergencies, extra dinners unpaid and the like will be taken care of. Classmates should be given an idea of the approximate cost of Reunion and when they arrive extra calls on their pocket books should not be forthcoming.

"It is better for the chairman to figure out the cost of insignia, dinner, etc., and charge each person a lump sum upon registration. If this is not done, some will decide that they want this and some that until confusion will result. If one helper gives out insignia, another handles tickets, etc., another checks up the cash and the buyers, there is very little chance for loss. At class headquarters should be displayed a good sized bulletin enumerating all events during Reunion festivities, for although cards were sent to classmates these are invariably lost.

"There is one safe rule for every chairman to remember, however, and that is that he should demand bills for everything furnished, pay by check and thus make sure that all his accounts are straight. There is nothing more embarrassing than discrepancies due to carelessness."

The following newspaper clipping shows the activity of our Classmate, Gerard H. Matthes: "Aerial surveying will become part of the curriculum at M. I. T. Mapping streets without disturbing traffic, mapping property without entering the premises and mapping extensive river valleys are some features of the new course.

"As a result of six lectures on aerial surveying just completed by Gerard H. Matthes, the Institute will offer instruction in this subject regularly to students in civil engineering. Mr. Matthes, an Institute graduate of the Class of '95, has largely developed in a scientific manner the art of aerial surveying. While directing the survey of the Tennessee River he employed this process.

"Among its many uses, aerial surveying is particularly well adapted to locating transmission lines in relation to proposed hydraulic developments. It is believed that the Massachusetts Institute of Technology is the first engineering school to teach this new specialty."

In a philological controversy this same versatile Classmate has attracted the attention of the *New York Times* in the ensuing reprint from its authoritative pages: "In connection with a suggestion recently advanced by Dr. Arnold Edwin Ortmann of the Carnegie Museum, Pittsburgh, that the official spelling of Muscle Shoals be changed to read Mussel Shoals because of the fact that the Shoals are named after the well-known bivalves abounding in that locality, it is pointed out by Gerard Hendrik Matthes, who has been identified with many engineering projects undertaken by various Government departments, that this question was brought up in the South a few years ago at the time when the Shoals were beginning to attract the attention of the investing public.

"Mr. Matthes, then engaged on a water power investigation of the Tennessee River for the War Department, happened to be familiar with the early history of the geographic name and his explanations, he says, were effective in silencing the agitation for any change. As a result, the old spelling has since prevailed. The story concerning the designation of the Shoals is related by Mr. Matthes as follows:

"The writings of early settlers and explorers in that part of the United States give the spelling uniformly as Muscle Shoals, often followed by a note that the name was derived from the muscle shells for which the place had always been famous with the Indian tribes. The earliest map of the Shoals made by the Government was that of 1832, prepared by officers of what was then known as the Corps of Topographical Engineers, U. S. Army.

"This map, which also shows the spelling Muscle Shoals, was for the purpose of locating a canal with nine locks around the Shoals to enable navigators to pass the latter. This canal is still in existence, though obsolete. All indications were to the effect that the name of the bivalve in those days was muscle shoals. This was substantiated by referring to dictionaries and encyclopedias, both old and new editions. One standard dictionary, edition of 1875, showed a wood cut of the shell and gave "muscle shell" as the only form of spelling. Later editions give both forms of spelling. About 1895 the form "mussel" is given preference. The most recent editions of Funk & Wagnall's Standard Dictionary and Webster's New International still mention under "muscle" the name of a shell as an old form.

"In the earlier writings mention is made of the fact that the "muscle shell" is so named because of the powerful muscles that close the two valves. Anyone who has worn out his jack knife pearl hunting on the Tennessee and tributaries can testify as to these

1895 Continued

muscles and wonders why "mussel shell" is not spelled "muscle shell."

"Mr. Matthes urges adherence to the old form of spelling the name of the Shoals for two reasons. In the first place, he says, it has been established through long usage, extending over more than a century, and secondly, the new form of spelling mussel is no improvement over the old form 'muscle'."

Frank C. Schmitz, General Manager of the Mahogany Association, Inc., New York, is scheduled for a convention to be held in Boston, May 11 and 12 as reported in Boston Chamber of Commerce *Current Affairs* of March 23. Someone stated at a recent Class lunch that Schmitz never came to Boston. The fact is he does and now is the time that you can catch him.

Frank A. Bourne, *Secretary*,
177 State Street, Boston, Mass.

'96

It hardly seems necessary to remind Classmates of the All-Technology Reunion on June 11 and 12, since so much publicity has been given to the event elsewhere in The Review. In the last issue the Secretary reported that he hoped to be able to make arrangements whereby an informal gathering of '96 men might be held at the Wianno Club over the week-end of June 13 and 14, but Mr. Skinner, the Manager of the Club, reports that by vote of the directors the clubhouse is no longer available for any gatherings outside of club members. Those of us who attended the Class Reunion at Wianno four years ago, learn of this action with much regret. It seems as if the Class was fated in the matter of places for its five-year reunions. Squam Lake, N. H., was a splendid place but Dr. Schubmehl gave up his camp so that it was no longer available. The Yacht Club at Saybrook was an ideal location, but when the clubhouse burned and was not rebuilt, it meant that we had to look elsewhere. When we found Wianno opened to us it seemed as if our troubles were over. Now we have to start all over again and look for another place. If the Secretary should find that there is a desire on the part of Classmates to have a little gathering this June, he will undertake to provide the place. There are three hotels in Osterville, and as Osterville is somewhat centrally located, it may be that we can do no better than to go to one of these hotels. Golf privileges on the Wianno links will still be available, although the clubhouse will not be opened to us.

The matter of the '96 Class Cup is now closed. Steve Gage's daughter, who was the Class Baby and who is now Mrs. R. N. Brodie, has written the Secretary that the dish arrived in due time but that acknowledgment was delayed because of a severe case of influenza and an extensive automobile trip through the country which occupied her time. She writes in part as follows: "My appreciation of your choice of gift is very keen. Its beauty and simplicity are perfect and I have already derived a considerable amount of satisfaction in exhibiting it to my friends and in placing it in a position of honor on my buffet. I wish to thank the Class of '96 for so honoring me and you especially for the trouble and time you have taken in its selection and your correspondence with me. I trust that at some time in the future I may have the pleasure of meeting the members of the Class of '96 at a class reunion and thanking them personally."

L. N. Whitney, as General Commercial Manager for the Telephone Company in New England, has been very busy appearing before legislative committees and explaining why an increase in rates is essential for his company.—Classmates will be delighted to hear that Andy MacLachlan has so far improved that he is able to be out again and was in attendance at the last meeting of the Alumni Council.—Walter James announces the appearance of Vol. II of Power Plant Machinery of which he is co-author with M. W. Dole. This is published by John Wiley and Son and covers the field of prime movers and auxiliary apparatus.—It is hoped that every '96 man will cast a vote for George Merryweather as a term member of the Corporation. We hope that George will be one of the winning men.

Woodwell called on the Secretary on March 16 and reported that he had been in Newburyport attending the birthday celebration of his grandmother who was one hundred years old. The Woodwells are apparently a long-lived family and if all goes well, Woodwell is counting on attending the celebration of our seventy-fifth class anniversary some years hence. He is feeling very proud of his last power installation for the municipal plant at Lansing, Mich. The efficiency test of the generator has been written up by him in the issue of *Power* dated January 27, 1925, and the tests of the steam generating unit of this plant have also been written up by him. A complete story of the plant by O. E. Bulkeley has appeared in the technical press. As a result of Woodwell's splendid work the individual members of the city of Lansing board of water and electric light commissioners have acted in behalf of that municipality and presented him with a silver loving cup at the termination of his services there.

Charles E. Locke, *Secretary*,
Room 8-109, M. I. T., Cambridge, Mass.
J. Arnold Rockwell, *Assistant Secretary*,
24 Garden Street, Cambridge, Mass.

'98

No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the May issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in the Review Office. Members of the Class having news or inquiries should address them to Arthur A. Blanchard, Secretary, Room 4-160, M. I. T., Cambridge, Mass.

'00

"Hello, Everybody!" This simple Roxyism means that we are glad that another month has rolled around and another opportunity to do a little broadcasting has presented itself—not that we get paid for doing it, but, like Roxy, we get a little kick out of it as we imagine you fellows turn at once to this column before reading the other pages.

Most of the news this month centers on the Reunion. We had a meeting of some of the local men at Walker on March 23, and we spent the whole evening discussing the plans and the men who would probably come back to the big event. The following men were present: Allen, Ashley, Burroughs, Brigham, Bowditch, Burnes, Conant, Cotting, Davis, Emery, Silverman, Stearns, Ike Osgood, Richardson, Walworth, Warren and Russell. We had a good time, as we always do, and 'tis too bad that so many of the men miss these little get-togethers. Allen, as chairman of the Reunion Committee, reported the progress in the general plans, and Cotting and Bowditch followed with outlines of the work already done in arranging for entertainment and transportation. Although Allen's general letter, which has been sent out to over 450 men, was only a preliminary one, fourteen replies have been received, twelve of which ask for reservations. Last night's meeting added to this list and over thirty have expressed their intentions of being present. Many of the men will bring their wives, and several, their older children, so that we already have over half a hundred of our possible accommodations taken. This means that we shall doubtless have seventy-five or one hundred of the Class present, making a total attendance of 125 or even 150. Of course an early reservation is in order. The three days for which the house party is to last, will be only too short when we once get together, and it is hoped that everybody will plan to be present all three days. There may be some, however, who cannot get away for so long a time and it is urged that no one stay away because of the fact that one day is all that can be spent with us.

Cayvan writes from Grand Rapids saying that he will be in on everything. "You couldn't have chosen a better place to get my enthusiasm up, as Osterville is the home of the famous Crosby Cape Cod 'cats.' Never mind the golf,—just reserve a catboat every day for me."—Lou Crowell, the original Cape Codder, says, "I shall surely be on hand for everything but croquet."—Jewett is going to chuck his big job in Cleveland long enough to come down and play in the sand and forget that the latter has anything to do with mixing concrete.

A perfectly corking letter comes from Henry Morris down in Washington, D. C., saying that his "Boss" and he will attend. Morris evidently knows the Cape from Penzance to Provincetown for he waxes eloquent over the bathing, lobster, clams, golf and what-not, saying, "If there are any doubters in the bunch, in this neck of the woods, just refer them to me."—We haven't heard from Red Chase directly, but Morris states that somebody with this name is going to be there. 'Nuff said! Ike Osgood is coming "with one wife and a Dodge car." C. E. Smith is out to win the long-distance prize by coming on from St. Louis. What do you know!—George Leach has bitten hard and thinks he can stop making shoes long enough to slip on the old drill suit and form a company on the beach.

Poor Wastcoat! Dick doesn't dare to trust the good news. It seems he heard there was going to be a reunion some five years ago and bought those famous white flannels for the occasion. The reunion did not materialize and the trousers became a liability. He wants to come this year but hesitates to buy a new pair (the old ones are too small at the waist) until he is sure we are really going. "Possibly I had better make my reservations this way: After you fellows get down there, telephone up to Taunton and I will come down." That will be all right, but Dick will have to sleep in the barn.

Fred Everett is coming from New Hampshire and Leatherbee is going to let business "rot for three days." And so the list goes on. They all have the fever and it won't be cured by anything but Cape Cod air, lobsters, clams, golf, tennis, baseball, and good fellowship. We must all remember that it is our Twenty-fifth and that, in the words of Cayvan, "there will never be another one." There will be a Fiftieth, however—for some of us.

The January number of *Industry* contains an interesting and illuminating article on "The Relation of Cost Accounting to Federal Taxes," written by Stanley Fitch. It would be well if some of you fellows who are tremendously bothered with a plethora of green paper would read and profit by so doing.

Nineteen hundred is hogging most of the front seats nowadays. Perce Ziegler was recently nominated a member of the executive

1900 Continued

committee of the Alumni Association. Good presidential timber there!

George E. Russell, *Secretary*,
Room 1-272, M. I. T., Cambridge, Mass.

'01

By the time this copy of The Review is delivered to the members of the Class who pay their alumni dues, a communication will have reached them from me concerning the proposed Reunion of the Class of 1901 which is to take place this June. The work of preparation has been conducted with the utmost secrecy, although a rumor was broadcast by the Associated Press somewhat earlier in the year. As this organization purports to print facts without opinions or comments, it remains for your Secretary to offer you a small amount of the latter commodity. Suffice to say that the West Bay Inn which will be the scene of our revels, is a commodious hostelry near the Wianno Club, where we spent those Elysian days of 1921. The food is guaranteed to be of the finest, and I presume the sleeping accommodations are equally satisfactory. This latter point, however, is of minor importance as no leal and true member of the Class will waste the precious hours of darkness in slumber. We shall have an opportunity to renew old ties, re-open old sores, and indulge in a debauch of reminiscence. Then with the affairs of the Universe and of the Class of 1901 properly set in order we will adjourn in a spirit of genial benevolence to Boston and assist the rest of Technology in carrying out its Reunion.

While the coming Reunion is perhaps the most important piece of news which I have to offer you, a few stray items of general interest have strayed in from individual members.

A press clipping has just reached me from Buffalo, presenting a picture of George Fisk who is Deputy City Engineer of that thriving metropolis. It also gives a carefully expurgated story of his life, committing itself, however, to the fact that he was born in Boston in 1878 and was educated in the Massachusetts Institute of Technology. The other salient facts consist largely of a recital of George's membership in various organizations of local and national significance. The striking likeness of George already referred to exemplifies a high state of pleasurable anticipation undoubtedly evoked by the thought of the coming Reunion.

Frank Cady and an associate named Dates have just published a book on illuminating engineering. If the participial modification be an accurate statement, I can prophesy extensive sale of the volume to the undergraduate body at Technology. In the words of the well-known Hebrew prophet, "Sometimes the light surprises the Christian while he sings."

Freddy Boyd writes me that he has just organized the Turbine Equipment Company of New England with headquarters in the Chamber of Commerce Building. Freddy is President of the Company, which is the New England sales representative of the De Laval interests. Visiting brothers please note that he is now to be found at 80 Federal Street. I note among other specialties in which the Company deals are reclamation systems, and I would sincerely recommend several members of the Class to see what can be done for them.

I have recently had a letter from Charlie Dennison telling me that Allen Tristram Griffin, who was among the missing, is now at 466 South Fifth Street, San Jose, Calif. Charlie is out in Wollaston as some of you probably know. He says his conscience troubles him for not keeping in closer touch with the Class. It is a laudable though painful emotion and one for which there is a sure method of cure.

Notice has already been taken in these columns of the partnership of Allen McDaniels with Newell & Corse in the Research Service which they have just established in Washington. I have recently received a small, neat folder outlining some of their activities. I note with interest that they state that large funds have been handled by members of the Staff. If the returns from Class dues approximate my hopes — not my expectations — I think we should put a little business in Allen's way. A steady employment of that sort should do much to solve the problem of office overhead for a young and struggling firm.

Out of the turmoil of the country's metropolis comes a welcome word from Joe Evans. Joe was the life and soul of the 1921 Reunion and expects to be one of the principal supporters of the forthcoming event. Joe suggests somewhat caustically that I date my bulletins and put my address on them. The point is well taken and it offers to me the first adequate explanation of the failure of many of the Class to respond to my modest appeals. Joe also writes that he has heard from Bill Le Bosquet both from Shreveport, La., and also from Tulsa, Okla. Bill's self-effacing and retiring progress through the years when '01 was privileged to number him as an active member, graved the memory of him deep on the minds of many of us. One could wish that Bill might attend the Reunion and I am trying both of the above-mentioned spots in the hope of reaching him.

Ellis Lawrence writes the following: "When in Boston recently I did my darndest to reach our Honorable Secretary — but to no avail. Perhaps the pleasant-voiced nurse forgot to give him the

message. It seemed strange to be walking about old haunts again — a stranger! I felt old and feeble until the old Professors at Rogers took me in whole-heartedly and one Miles Standish Richmond, '00, spoke casually to me in passing, although it had been twenty-four years since I last saw him. My three sons were glad to see the old and new Tech and two of 'em will some time land there if all goes well with Pa-Pa. While at the Convention of American Institute of Architects at Washington someone slipped and nominated me for First Vice-President. The only reason I take it that I was elected was that I had such a cold I could not make any speeches. We had a great trip — after doing Washington, New York and Boston we had three weeks on the Maine Coast, returning via the Great Lakes, Canadian National, Prince Rupert to Vancouver by boat (a wonder sail). While in Montreal I found plenty of signs of the handiwork of one George Hyde, '01, a prominent architect there, and managed to have a good chat with him over the phone. Bill Sayward, '01, now of the Great South, was elected a Director of the Institute at the Convention in Washington, so I shall now enjoy my two eastern trips to attend the Board meetings this coming year."

I wish profoundly that some of the great silent souls of this Class would overcome their coy reticence and send me any few lurid details of past or present performance. Don't be hampered by fact — you probably never have been — but remember that every member of the Class has some interest in the way in which the world is treating you.

Allan Winter Rowe, *Secretary*,
295 Commonwealth Avenue, Boston, Mass.
V. F. Holmes, *Assistant Secretary*,
131 State Street, Boston, Mass.

'02

Major Charles E. McCarthy writes from Sacramento, Calif., that having been three years in foreign service at the Isthmus, he is now detailed as an instructor of the 184th Infantry, California National Guard. Mac states with regret that he cannot attend the Reunion in June as he will be busy preparing for the summer camp of the regiment and also he may be detailed to C. M. T. C. or R. O. T. C. camps. His address is 1032 Forum Building, Sacramento. —Our other classmate in the army, Major Philip H. Worcester, is taking a one year course at the Army War College. His address is 2310 Connecticut Avenue, Washington, D. C.

Arthur Nickerson left the Engineering Department of Stone & Webster on the first of the year and is now Assistant to the President of the Waldorf Lunch System, his special duty being the location and equipment of new units for this organization, which, starting from Boston, is now spreading lunch rooms all over the eastern part of the country.

Details as to Class doings in connection with the general Reunion in June are not perfected at this writing. Particulars will be sent out direct to all classmates. Everyone who can, should make his plans to be present at that time.

Frederick H. Hunter, *Secretary*,
Box 11, West Roxbury, Mass.
Burton G. Philbrick, *Assistant Secretary*,
276 Stuart Street, Boston, Mass.

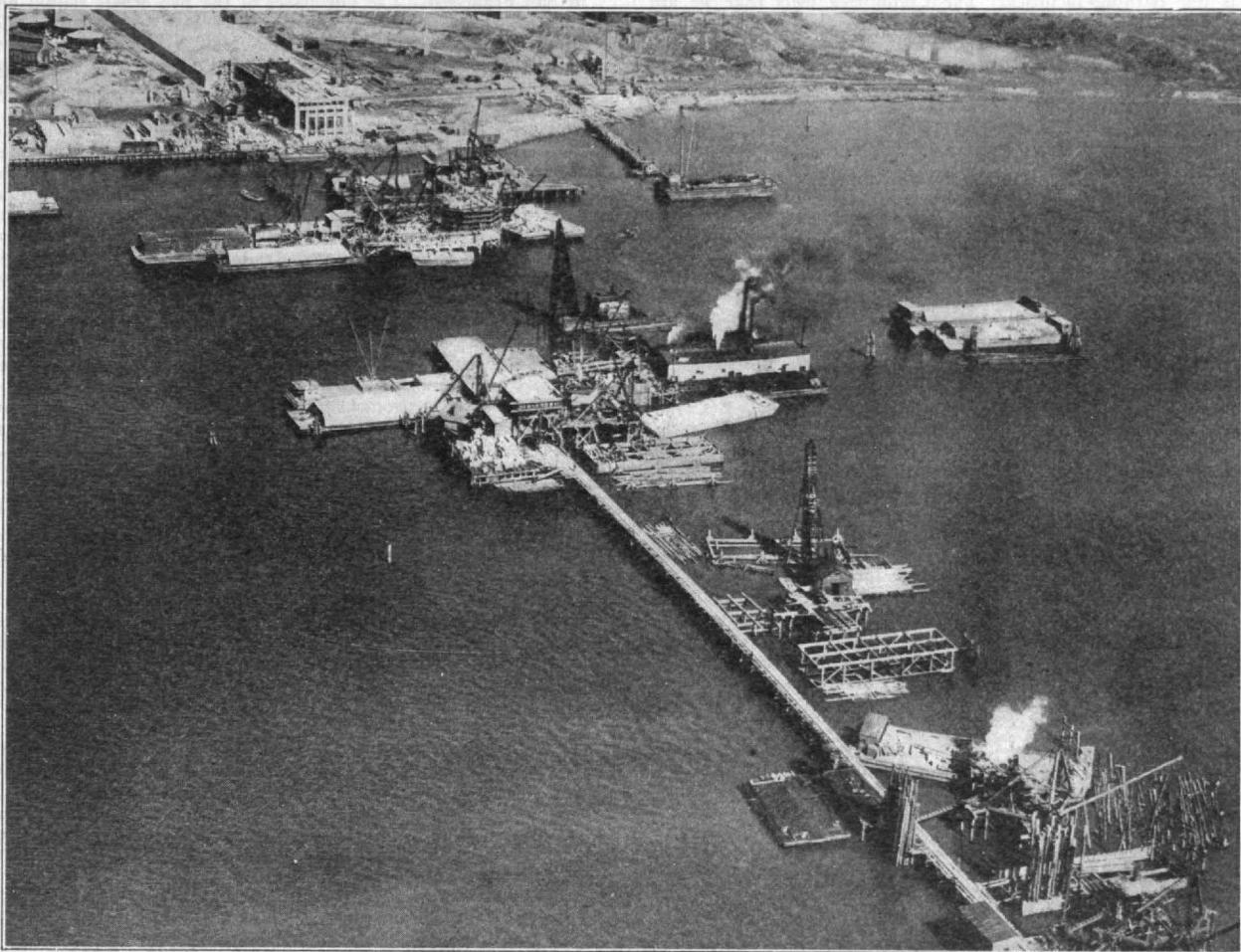
'04

On March 16 the Secretary called a committee meeting of about a dozen members for the purpose of discussing the coming All-Technology Reunion and the Annual Class Reunion. The meeting was held at the Engineers' Club and was thoroughly enjoyed by those present.

It was decided to hold the Class Reunion on June 12, 13 and 14 in conjunction with the big Reunion, as it was felt that this might result in a large number of our Class being present at both affairs. As these notes are being written (March 23) the details of the big Reunion are not available with sufficient definiteness to be able to announce exactly how the two events will be combined. Possibly by the time this issue of The Review is in the hands of its readers, other communications will have been sent out which will convey much more information than can be given here, and, in such case, these words will be a repetition.

It was with considerable regret that the Secretary was obliged to inform the Committee that it would be impossible to hold our Class Reunion at the Wianno Club where we have been so comfortably entertained the past five years. The Governors of the Club have recently made a rule that no more college classes can be entertained as such at the Club. We have been very fortunate in being able to hold five gatherings there and those who have attended will probably feel, as the Secretary does, somewhat like a person who has been forced to leave a home where many happy hours have been spent.

Arrangements have been made to hold our Class Reunion at the Mayflower Inn, Manomet Point, Plymouth, Mass. The Inn is wonderfully situated on a high bluff overlooking Massachusetts Bay and several other classes which have held reunions there have been enthusiastic over its appointments. There is a nine-hole golf course on the grounds and the Plymouth Country Club has a fine eighteen-



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Airplane View of "Victory" Bridge, Perth Amboy, N. J.

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LOUVAIN, BELGIUM

BUILDERS OF SUPERSTRUCTURES AS WELL AS SUBSTRUCTURES

1904 Continued

hole course a short distance away. Tennis courts are available as well as fine bathing facilities. The Committee feels that we are fortunate in being able to go there for our Reunion this year.

It is hoped that the Reunion will be well attended because the success of such a gathering depends more on those who are present than on the place where it is held. The fact that the Mayflower Inn is much nearer to Boston should make it easier for a larger number to lend their presences.

Phil Sweetser has started something unique. Under the caption of Philip S. Sweetser & Company, he is furnishing a service known as "Investment Counsel." The object is the furnishing of advice in investment matters in the same manner that a physician furnishes medical advice or a lawyer furnishes legal advice. It would seem that there is a fine field for an endeavor along this line. During his connection of many years with the Babson Organization, Phil acquired a wide knowledge of the subject and is eminently qualified to succeed in this venture. The concern has offices at 50 State Street, Boston, as well as a research and statistical department at Auburndale.

Charley Stebbins spent a portion of the past winter in the South. He reports that he enjoyed his stay very much, finding no snow there and that heavy overcoats are not popular most of the time. He finally came home to get cooled off. As a matter of fact, he was away from the frozen North about ten days, going to Birmingham, Ala., to see how they make the iron pipe which he is so busily engaged in selling around these parts.

The announcer who conducted the broadcast from Station MCMIV in the March Review, was overjoyed to receive one written acknowledgment of its reception. This was more than was expected and he takes this opportunity to make a public record of it.

"Station MCMIV: Program coming in fine. Keep it up." Ros Davis, Secretary, 1905."

Question: Are there any members of 1904 who are willing to emulate the example set by the Secretary of '05? Answer: Apparently not.

Henry W. Stevens, *Secretary*,
12 Garrison Street, Chestnut Hill, Mass.
Amasa M. Holcombe, *Assistant Secretary*,
3305 18th Street, N. W., Washington, D. C.

'05

Wallace MacBriar writes from Seattle, Wash.: "During the last twenty years, I have acquired a moderate sized family, consisting of two girls and two boys, making a total of four lusty youngsters whose principal delight is to raise — most of the time.

"I am still working for 'Carnation,' and have been General Superintendent for about two years. I was formerly chief engineer, as you perhaps know. I am now really handling both jobs, and have just added the Operating Department to my former duties in order to keep busy. I do considerable traveling but as a rule do not get farther East than Chicago. I am sorry I will not be able to get back for the Reunion, but inasmuch as my wife has given notice that she is going back for her Smith reunion at Northampton in June and is going to take all the children, what chance have I, with railroad fares what they are?"

Now that will never do. We have suggested to Mac that he look up car-load rates and see if he cannot put through the whole family as cheaply as five.

A brief letter from Dan Adams advises that he was moved out to Detroit the first of the year to manage the Detroit office of Lockwood, Greene & Company, Engineers. He says: "This is good in some ways and pretty tough in others." You may draw your own conclusions.

We thought we had some news last month when we introduced Bill Tufts, but now find it was two years old. It seems that the condition of Bill's health made it necessary for him to get outside. Hence the change. We are very glad to report that he is now in tip-top shape. He says: "You can always get me at Candy Hill, Sudbury, Mass. That's my home and the only farm worth owning." Attaboy, Bill.

Dick Marsh has gotten into trouble with the government of Panama. It seems that the famous white Indians were flying American flags on their dugouts and Dick was accused of starting it all. Personally we think it was only the Indians' way of expressing their appreciation to him for putting their locality on the map. Anyway, he left the country on an American cruiser.

Frank Payne is back from his two years in England and was last reported from Vancouver, B. C.—Fred Andrews is off again. He is resident engineer for the Tropical Radio Telephone Company, at Hialeah, Fla. What station is that?—Jason Merrill has given up teaching at the University of Maine and is now with the Penobscot Chemical Fibre Company, Great Works, Maine.—Harry Gabriel is with the New York Central Railroad, 466 Lexington Avenue, New York.—Victor Paquet is engaged in private literary work in Portland, Ore.—Lovell Parker is chief engineer, Senate Investigating Committee, Washington. Who would have thought they had a chief

engineer?—Norman Lombard is now rated Business Counsellor, still in San Francisco. The businesses of the two coasts should be well advised with Norman on one and Ray Bell on the other.—Ralph Tarbett remains in the U. S. Public Health Service but has moved to El Paso, Tex., 321 Mills Building.—Ed Burkhardt is manager of the General Oil Heating Company, 903 Boylston Street, Boston.—Bill Motter is back from Chile.

Herb Wilcox has been with The Winchester Company since 1914, until recently at headquarters in New Haven. Last summer he was transferred to their St. Louis office. From October to December he was at the Philadelphia branch and in January went to San Francisco, from which point he wrote: "You may say that I find the reports of the California sunshine have been greatly exaggerated — in five weeks we have had five sunny days — rain and fog for the rest. But I guess we've escaped a real he-winter back East and the country out here is pretty fine. We've had one or two interesting motor trips over week ends, the first one being 150 miles down the coast to Monterey through the Santa Clara valley down, and back through the Santa Cruz mountains and the big redwoods around Los Gatos."

And here's another one from California. Bob Adams, Earthwork Contractor, writes from Colfax: "During recent years my activities have been in places where other Tech men have been entirely missing. It has been a long time since I have run across one of them and longer since I have had the pleasure of meeting a classmate of 1905.

"Some of the fellows may be interested to know what I have been doing so I will follow the suggestion contained in your letter and tell briefly about it. Gradually I have left the strictly theoretical field and have taken up the construction of engineering works as a contractor. My field has been the San Joaquin Valley of California, where I have built irrigation canal systems, drainage canals and levees. At present I am building a section of the Lincoln Highway in the Sierra Nevada between Colfax and Gold Run. This is heavy grading through mountains and requires the handling of 340,000 cubic yards of material, mostly rock, in a distance of eight miles. This highway is one of the main routes into California and when completed will be a magnificent example of road construction. It is twenty-six feet wide with maximum grades of six per cent and maximum curves of 300 feet radii. The flivvers can take it all on high and not slow down to thirty miles an hour unless they wish to observe the speed laws. Some idea of the money that California is putting into this work can be gained when it is considered that the contract price on this eight miles amounted to three hundred thousand dollars.

"As you can readily understand, contracting proves to be always interesting and contains many elements of excitement. If there is a drawback about it, it is that one is so busy with pushing the work that other interests are often neglected. In my case, the necessity of finishing the contract on time prevents any possibility of joining the All-Technology Reunion this spring, which is a thing I should like very much to do. There are many faces of good old friends that I would greatly like to gaze upon once again.

"Today we have the unusual phenomenon of a heavy snow-storm, which has covered the construction camp with a six-inch blanket, overwhelmed the wild flowers, knocked off the fruit blossoms and brought our gasoline shovels and dump trucks to a standstill. It will melt directly and meanwhile we make our bid to civilization by alternately turning on the radio and catching up on delayed correspondence."

All of which is very interesting, especially the California brand of flivver, taking the mountains without slowing down below thirty miles an hour. Of course, we all know that California products are — but what's the use? Anyway, the letters from California have been large and juicy and always welcome.

On Friday, the thirteenth of March, we tempted fate and held the regular winter dinner at Walker Memorial. Thirty showed up and talked over the coming Reunion between the musical numbers of Killion and Pirie. Later on the alleys, teams picked and captained by Crowell and Fuller easily disposed of those of Boggs and Strickland. There was no final. Among those present: Arthur Abbott, Fred Abbott, Ball, Barrier, Boggs, Buff, Coffin, Crowell, Davis, Dissell, Farrington, Fisher, Fuller, Gilman, Goldthwait, Hawkes, Johnson, Keith, Kenway, Killion, Lord, McLean, Marcy, Pirie, Prescott, Shaw, Strickland, Tebbets, Thompson, Tower.

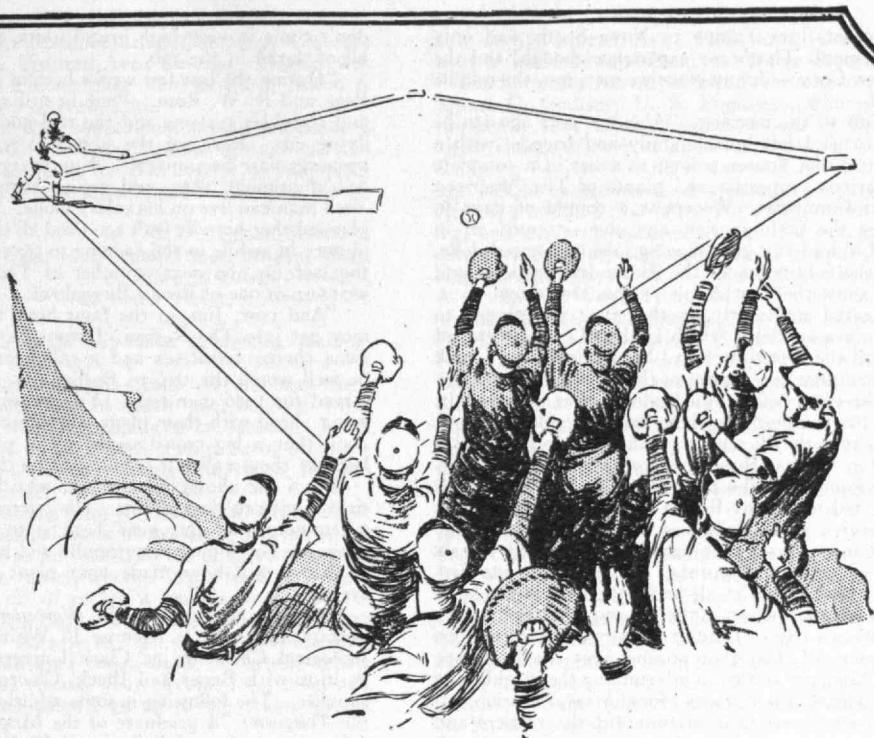
Roswell Davis, *Secretary*,
12 Atlantic Avenue, Beverly, Mass.
S. T. Strickland, *Assistant Secretary*,
26 Pemberton Square, Boston, Mass.

'06

It is not necessary to remind the Class that for the last two issues in which we were supposed to have notes we have been included in the "No notes received from the Secretary" class.

To avoid a repetition of this deplorable condition the Secretary appealed to his assistant for aid. Almost in less time than it takes to write it Ned responded with the following:

"Funny how a fellow can be away from home the best part of a



But the whole team doesn't play first base

To suppose that a baseball nine will all cover just one position is as far from the truth as to think that everyone in the electrical industry is an engineer.

This field will always need trained engineers. But with its great manufacturing, construction and commercial activities, the industry must have non-technical men too.

Since the industry is manned by many types, the result of your work will depend a good deal on the success with which you team up. The qualities that win are not only efficiency attained by the light of a study lamp, but that all-pull-together spirit of the athletic field.

This point of view may be useful to the man who has wondered whether campus activities, with all their striving and stern testing, their setbacks and their triumphs, have any counterpart in after life.

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Western Electric Company

This advertisement is one of a series in student publications. It may remind alumni of their opportunity to help the undergraduate, by suggestion and advice, to get more out of his four years.

1906 Continued

year and cover the coast from Tampa to Nova Scotia and only meet up with one '06 man! That's my experience though, and the other '06 man was Stew Coey — funny place we met, too, the middle of Long Island Sound.

"Here's what led up to the meeting. About a year ago (to be exact on March 16, 1924) I left home, family and friends, with a few old clothes and a tourist floater policy, to assist in a complete re-appraisal of the various properties and plants of The American Agricultural Chemical Company. We spent a couple of days in New York going over the preliminaries, and then stopped off in Washington to see if Cal had any gum-shoeing jobs he wanted done. Incidentally, we took the field notes for the Alexandria property and enjoyed six inches of snow there on April 1 — no, real snow!

"Florida being vacated sufficiently by that time we jumped to the phosphatic rock mines at Pierce which is about 40 miles inland from Tampa. As it was the first time I had been below Jax., I took advantage of my opportunity to see some of the West Coast country — you can't get off the train before you begin to hear all about it. At least seven out of ten people down there have some land (above water or under water) that they'll sell you cheap and you can sell it day after tomorrow for at least three times what you paid for it. Some of my gang are going to make their fortunes that way — I'm not, because I'd neglected to sell my Rolled Rice before I left home.

"I managed to survive the pitfalls and temptations that beset the unsophisticated Yankee down there and really enjoyed the six weeks or so, in spite of 'grits and grunts,' sulphur-water and fire-water. Clifford, Lawrence, Laws, et al, had done such a good job that I remembered to keep both feet in the air and my left hand on what was left of last week's pay so I didn't get nipped by the 33,000 volts that C. V. Turner, VI, had shot around over the landscape before he turned City Manager and got a job running the neighboring town of Bartow. By adding a few stages of audio amplification and sharpening my selectivity I managed to tune out the rattlers and moccasins, and soon learned to flick the left eye out of a two-inch cockroach with any old towel. I never had liked the sneakers I used to wear at the Exeter Street gym, so I finished them playing tennis on a concrete court every evening, and borrowed some sticks to play golf on Turner's Bartow links where they've turned the rough around the fifth hole into an orange grove — there were a few fruit left, too.

"Leaving the rest to your imagination (and for the June Reunion) we'll move rapidly up the coast to where Stew Coey is waiting out in Long Island Sound. After cleaning up Jacksonville and Baltimore, I managed to get home for the Fourth with my family. A few weeks later I left them down on the Cape, about the same time that Coey was leaving his family down in Maine, and that's how we happened to meet up. We were both heading back for New York, but Stew sailed from Boston on the *Boston*, while I sailed from Fall River on the *Priscilla*, and it happened to be that foggy night when the *Boston* was rammed by a tanker. So I had the pleasure of rescuing Stew from going through that harrowing experience and then not having anybody in particular to tell it to! The next morning I took his picture for the archives and made a date to see him soon out in Jersey for a game of golf or tennis. Stew is now Treasurer and General Manager of the Asher Manufacturing Company of Irvington, N. J., and hangs up his hat in Glen Ridge.

"However, I haven't seen Coey since, for instead of spending the rest of the summer around New York, I moved part of the crew to one of the Boston plants and drove back and forth between Wellesley Hills and North Weymouth until about Thanksgiving, with a few weeks near Portsmouth and a short trip to Nova Scotia. December and January, I spent in and around New York, and since then have been digging through a hundred or more volumes of inventory and valuation data to see if we got any of it right! It runs up to forty million reproductive cost for all the properties so, as fertilizer plants

don't come in very high priced units, you can imagine there was a bit of detail in the job.

"During the last few weeks here in Boston, I've run into Roland Page and R. W. Rose. Page is still selling Lea Courtenay pumps and sprinkler systems and the real good old-fashioned fires are fast dying out. Rose for the past few years has been developing his property near Swampscott. I understand the houses he puts up are full of original ideas, and are so economical that even an honest Tech man can live on his salary alone. They are so efficient and well planned that his wife isn't too tired all the time to have the neighbors in once in awhile in the evening to play cross-word puzzles. Look in the last (or the next) number of *The House Beautiful* for a nice write-up of one of Rose's Bungalows.

"And now, Jim, in the faint hope that by some mischance this may get into The Review, I want to announce that I have saved some choice narratives and a collection of pictures that alone will be well worth the trip to Boston next June, when they will be reserved for 1906 men only. You know the Reunion Committee are going ahead with their plans, and Brackett told me only yesterday noon that a big crowd seems to be planning to attend — perhaps because they realize it is going to be the Best Yet."

From the above it is evident why Ned has not had very much time to give to class affairs. His reference to the Reunion in June is a reminder that this year Tech is to have a Five-Year Reunion. Plans are developing very rapidly and by the time you read this you, of course, will have made your plans to be in Boston for the big event.

A notice appeared in the *Worcester Telegram* early in the year announcing that Dr. George F. White, Professor of Organic and Biological Chemistry at Clark University, had resigned to take a position with Bauer and Black, Chicago, manufacturers of surgical supplies. The following is some additional information quoted from the *Telegram*: "A graduate of the Massachusetts Institute of Technology in 1906, and Fellow and Ph.D. of Johns Hopkins in 1910, Dr. White began his teaching career as Associate Professor of Chemistry at the University of Richmond, where his work was brought to the attention of the authorities of Clark University. In 1912, he became instructor in organic chemistry, and has since advanced to an assistant, associate and finally to a full professorship. During the summers from 1916 to 1919 he was employed as a research chemist by the U. S. Bureau of Fisheries at Woods Hole, experimental station, where he did research work on fish oils. He made an extensive study of the dogfish, establishing its digestibility and nutritive value as a food, and perfected methods of canning it. From 1916 to 1918, he was employed by the U. S. Public Health Department when he worked out corrective methods to prevent the poisoning of workers manufacturing T. N. T. The next year at the request of Worcester City hospital officials he established there a bio-chemical laboratory, which has added greatly to the efficiency of that institution.

"Besides teaching at Clark he was professor of chemistry in the Williams and Mary College summer school in 1923. Dr. White is the author of many scientific books and papers which have appeared in American scientific journals. His most prominent works are 'A Manual of Inorganic Chemistry,' published in 1911, and 'Qualitative Chemical Analysis,' 1916, which his classes at Clark in qualitative analysis are today using as well as many other colleges. He is a member of the American Chemical Society, the American Association for the Advancement of Science, the Tatnuck Country Club, and the Worcester Economic Club."

If it wasn't for Harold Coes the Class record for writing letters would be equal to the Secretary's for compiling notes. Harold, however, has always been a good scout about writing, his last letter arriving last December, in which he announced he had been made

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CAMBRIDGE

1906 Continued

Vice-President of the Belden Manufacturing Company, Chicago. His new address is 2300 S. Western Ave., Chicago. Harold was formerly at the head of the Philadelphia office of Ford, Bacon & Davis, the industrial engineers of New York.

Emulating the example of the broadcasting station announcers, we will sign off by saying that if you have liked our notes, won't you please drop us a line telling us about it. The receipt of your post-cards, letters, and so forth, will be acknowledged in our next broadcast.

J. W. Kidder, *Secretary*,
Room 1004 Broad Street, Boston, Mass.
E. B. Rowe, *Assistant Secretary*,
108 Water Street, Boston, Mass.

'07 Changes of address do not make interesting reading, but oftentimes they serve to give much-desired information to members of the Class. Several such items occur in this issue, some of which must be given without comment, as further and more readable facts are lacking.

F. E. Banfield, Jr., is now at 265 North Street, Saco, Maine.—Walter Bigelow is a member of the engineering firm, Rich, Bigelow & Tirrell, 333 Washington Street, Boston, Mass.

The following note was received from Jim Barker, who is manager of the branch of the First National Bank of Boston at Buenos Aires: "Your circular call for help was forwarded to me at this hot-springs hotel near the summit of the Andes, where I came for a few weeks to take the baths and get rid of rather a troublesome attack of Rheumatism. (I spell it with a capital and underline it so you can draw your own conclusions.) As soon as I get back to Buenos Aires and a dollar checkbook I shall send you a check for fifteen dollars and become a life member. I enclose your circular form filled out. I hope we shall see each other when I go up to the States for my vacation in April of this year."

Rutherford Bingham is with the Standard Oil Company of Venezuela, Caracas, Venezuela.—W. H. Bradshaw is at 90 Third Avenue, Little Falls, N. J.—Carl Brewer's address is 216 Mesaba Street, Hibbing, Minn.—Benjamin F. Carter is now at 1221 E. Brill Street, Phoenix, Ariz.—Howard R. Chase is a structural engineer with James H. Tower Iron Works, Providence, R. I.—John W. Conover's new address is 1442 West Market Street, Steubenville, Ohio.—Harry R. Crohurst is with the U. S. Public Health Service, Third and Kilgove Streets, Cincinnati, Ohio.—L. D. Davenport is

now at 915 Martel Ave., Hollywood, Calif.—Victor H. Dickson is with the Hollywood Land and Water Company, Hollywood, Calif.—The Secretary recently enjoyed renewing acquaintance with Major Stuart C. Godfrey, U. S. Engineers, who is now located on the thirteenth floor of the Custom House in Boston. He is now in direct charge of harbors and coastline from New London, Conn., to Eastport, Maine. Godfrey was with our Class for one year only; but will be remembered as a member of the Class football team. He was graduated from West Point as number one in his class standing, and is now considered as one of the most brilliant and brainy officers in the army engineers. He is married, has a boy eight years old, and a girl six, the family now living in Brookline, Mass.—George A. Griffin is at Woods Hole, Mass.—Hudson B. Hastings is Professor of Administrative Engineering at Yale University, and lives at 6 Everit Street, New Haven, Conn.—John C. Kinnear is with the Nevada Consolidated Gas Company, McGill, Nevada.—John H. Leavell is with the Leavell Coal Company, Tulsa, Okla.—Harold C. Libby lives at 2122 Greenway Street, Charlotte, N. C.—Byron F. Luce is with the Antillion Sugar Company, Cueto, Oriento, Cuba.—Howard H. McChesney lives at 411 Bryn Mawr Avenue, Cynwyd, Pa.—Herman W. Mahr's new address is 34 Zeigler Tract, Penn's Grove, N. J.—George R. Norton is development manager with Eaton, Crane & Pike, paper manufacturers at Pittsfield, Mass.—Bob Rand, having made a new business connection, is with Halman Steel Company, 333 Washington Street, Boston, Mass.—De Witt C. Ruff has written us the first note, we think, since 1907. We are glad to hear from you, D. C. He is a member of the firm of Healy-Ruff Co., manufacturers of E. Z. Radiator Hangers, 765 Hampden Avenue, St. Paul, Minn., home address, 2211 St. Clair Street, St. Paul. He says he expects to be in the East in June and will make it a point to be in Boston at the time of the Reunion. Good Stuff!—John Tetlow is at the U. S. Naval Ordnance Plant, Baldwin, Long Island, N. Y., and Joseph D. Whittemore, at 206 Outlook Road, Fairmont, W. Va.

The following notice from a Denver newspaper regarding John Evans indicates the marked success of one of our classmates:

"The 'Evans tradition' became more prominent at Denver University when John Evans, third in direct line of family descent to hold the office, was elected President of the Board of Trustees of that institution.

"John Evans succeeds his father, the late William G. Evans, as head of the trustees, and William G. Evans succeeded his father,

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Boston, Massachusetts

1907 Continued

John Evans, in the position. The latter John Evans was one of the founders of the university and the first President of the Board of Trustees. He was a Territorial Governor before the Centennial State was admitted to the Union.

"The election of John Evans to the post so well administered by his father and his grandfather is more than the carrying on of a fine tradition," said an announcement accompanying Evan's election. "The task faced by the new president in many ways is a greater one than the tasks accomplished by the members of the Evans family, who have preceded him."

"Officials of the university directed attention to the steady growth of the institution in recent years and pointed out its present program of expansion, including the erection of new buildings, a new concrete athletic stadium and the drive for a million-dollar 'general fund.'

The newly elected President of the Board of Trustees is president of the International Trust Company of Denver; vice-president of the First National Bank of this city; a director in numerous financial institutions, and a trustee in several charitable organizations. He attended the University of Denver, and later he was graduated from the Massachusetts Institute of Technology.

"Evans' grandfather, also John Evans, founded the University of Colorado, then known as Colorado Seminary, in 1864. In the past sixty years it has grown from a small seminary to a university, with an enrollment this year in excess of 3,000 students.

"The original John Evans was also known as the 'Father of Northwestern,' having been a factor in the organization of that college in Evanston, Ill., which city was named after Evans.

"The election of John Evans as President of our Board of Trustees marks the beginning of a new era in the history of Denver University," declared Herbert R. Harper, chancellor of the institution. "Mr. Evans has a wide acquaintance with men of affairs, a high degree of business acumen, a wealth of executive experience, and will be invaluable for the wise conservation and development of the university's resources."

The following is taken from *The Washington (D. C.) Herald* of Sunday, March 15, regarding Allen Pope:

"Digging of a \$250,000 tunnel that will carry water from the new reservoir to homes in northwest Washington is going forward at a record-breaking rate, according to Allen Pope, engineer in charge.

"Three shifts of workmen are digging the passage night and day, some working from its starting point, at Forty-fourth and Upton

Streets northwest; some working from the hill at Wisconsin Avenue and Pierce Mill Road, under which it passes, and others digging at its end, near the Bureau of Standards.

"The tunnel is the engineer's answer to the problem of getting water from the reservoir to residents of the city on the other side of the hill. Accepting gravity's mandate that water shall not flow up the hill, the work of tunnelling under will send the water under it.

"For almost the full length of the tunnel—3,600 feet—the way is blocked by hard Bethesda granite, but Pope has assembled excavating machinery which he believes will enable him to finish the job fifteen months before his contract schedule.

"Four-toothed revolving drills, driven by a 200-horsepower motor, will make the first attack upon the granite strata. Each drill bores a hole two feet deep and two inches in diameter in less than a minute, but then it is worn and must be resharpened. Pope said 600 drills are used every day.

"Dynamite which is packed into the drilled holes and ignited totals 300 pounds a day, enough to blow to bits the United States Capitol and Library of Congress.

"To remove the blasted rock, or 'muck,' from the tunnel, Pope will install this week a new shovel loader, which can throw fifty tons of rock into waiting cars every hour."

Allen writes that his boy Tom is taking entrance exams for Tech this spring, with a view to entering in 1926. We do not know of any other '07 man whose son will arrive at the Institute as soon as that.

Bryant Nichols, *Secretary*,
2 Rowe Street, Auburndale, Mass.
Harold S. Wonson, *Assistant Secretary*,
W. H. McElwain Company, Manchester, N. H.

'08 We are glad to report another good turn-out at the last bi-monthly dinner which was held on March 10. Booth, Davis, Joy, Hussey, Kedy, Coffin, Leslie, Clark, Bangs, Sewall, Esten, Ellis, Kennison, Collins, Cook, Mayo, Heath and Carter were present.

Mayo reported that class dues for 1925 are beginning to come in, but there are still many who have not come across. The Reunion Committee made a very favorable report. Out of 375 letters sent out to the members of our Class and those affiliated with us, 140 replies have come in, 50 men expressing themselves as intending to come to the Reunion. This will mean the biggest Reunion we have ever had and it is hoped before final arrangements are made that many more will decide to come. We were lucky to get the West Bay Inn, where we held our Fifteenth Reunion, as it is an ideal spot for such purposes. We will have the whole hotel to ourselves with golf links right off the front porch. The committee is planning a lot of interesting features, and they have now instituted a drive on the delinquent members of the Class who failed to send in their cards, as they want to make this the biggest ever.

The following fellows outside of Massachusetts are planning to come: George T. Glover, Lima, Ohio; John Gianella, N. Y.; William H. Toppan, Augusta, Maine; L. E. Wemple, Chicago, Ill.; Henry W. Blackburn, Burlington, Vt.; A. A. Longley, Chicago, Ill.; George Belcher, Manchester, N. H.; Douglas Cairns, N. Y.; R. W. Ferris, Akron, Ohio; J. M. Burch, Jr., Dubuque, Iowa; C. O. Brown, N. Y.; Charles W. Morrison, N. Y.; F. C. McGuigan, Jr., N. Y.; Clarence L. Hussey, Providence, R. I. Ralph Batchelder of Batchelder and Sales, Indianapolis, hopes to be with us also. Paul Fernald located at Tuscon, Ariz., although unable to come East this June writes that he is planning to be with us in 1928. He writes that he is engaged in pumping out and re-timbering an old lead silver mine that has been shut down and flooded for the past twenty-five years. He cordially invites any who may be in his vicinity to come to Tuscon and sample its hospitality.

Sewall gave us a very interesting talk on his experiences in doing business in China, Japan, Australia, and so on. It was one of the

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1908 Continued

most enjoyable talks we have had this winter and we wish to thank Sewall for his willingness to help out at such short notice. I ran into Win Ford the other day, and he tells me he is now a proud father as "Marilyn Drew" was born January 27, 1925. While he has not been able to come up to any of the bi-monthlies this winter, he is planning to be with us at West Bay Inn.—Sam Hatch writes that as soon as the roads are in better condition, he hopes to come up to one of the bi-monthly dinners. He is also planning to be with us at Osterville.

We are sorry to announce the death of Hugh Correll, Canton, Ohio, which occurred nearly two years ago. Ralph Regnell died in Boston, March 18, 1925.

The final bi-monthly dinner of the season will be held May 12, at six-thirty p.m. at Walker Memorial. We are planning a special entertainment feature and in addition the Reunion Committee will have considerable to report.

H. L. Carter, *Secretary*,
185 Franklin Street, Boston, Mass.
Lincoln Mayo, *Treasurer*,
181 Massachusetts Avenue, Boston, Mass.

'10

We had a whale of a time at the Class Dinner on March 17 with 29 members of the Class present and Ike Litchfield as our guest. Tech songs and Class songs were given with much gusto. Gage, '23, who has been a fixed star in the Show for some years and a popular dinner entertainer since gave us some clever songs and performances on the piano. Ike told us in a most entertaining way the history of all the Tech Reunions and went over the episodes of the Harvard-Tech merger fight in a way which was most interesting. He also gave us a few Reunion hints that sounded mighty attractive.

It was voted unanimously at the dinner that we should make the two-day trip in June a stag affair. Your committee has had two meetings since the dinner and is deep in plans and discussions, but the second issue of *The Mitten* will be out before this publication appears and will contain later news of the plans, so it is useless to try to outline them here. Suffice it to say that all those present at the dinner expressed themselves as expecting to attend the Reunion doings and there are at least twenty more who have been heard from already, who plan to be on hand. New York will undoubtedly send a large contingent.

Ralph Preston writes: "Your cheery *Mitten* makes me realize I haven't done a thing for Class items for The Review or otherwise and yet I have wondered why 1910 seemed so dead! It hardly seems that there can be much of interest in the very simple story of my adventures since seeing a goodly number of the fellows at the reunion in 1920, but here goes:

"I left the Goodyear Tire and Rubber Company in the spring of 1921, and came here to New York with Dillon Read & Company, investment bankers, in their investigating department. In July of 1923 I was married. My wife was Ruth Huntington of Spring Valley, N. Y. We are now living in the suburb Mount Vernon. Occasionally I see a classmate in the city. A couple of months ago, I had lunch with Nat Seeley, who is floor member of a stock exchange house. Just a few days ago I ran across Horace Stump, who is doing a consulting chemist business down town.

"My favorite recreation is small boat sailing on Long Island Sound, the only playground I know of near New York City, that isn't crowded. I have been interested to note 'honorable mention' of Ted Geary in various yachting periodicals. In fact, he is listed as some time owner of a 'Star' class boat, in which class I hope to do something this summer." Let's hope Ralph doesn't find sailing too tame after balloon racing.

I wrote Geg when scouting for stuff for *The Mitten* because his facile pen was responsible for some of the brightest touches in the issues that came out in 1916 and asked him to contribute. His letter follows:

"I am moving from Niagara Falls to New York City this month. I am still with the Mathieson Alkali Works, and will remain with them, but will move from the Niagara Plant to the Executive Office in New York, and will become Chemical Director,—exact title uncertain as yet, but that's the job anyhow. As you may know, we also have a plant at Saltville, Va., which you may have heard about as a result of the publicity given the very unfortunate accident which occurred there on Christmas Eve.

"Besides leaving the Falls I will also leave behind my old German name. This is a move we have had under discussion for several years and the present change in location seems to offer the opportunity. It required very careful consideration of the arguments pro and con, but we finally decided to make the change. I believe my two boys will appreciate it later, and I think my wife and I will find our new name more comfortable,—particularly in New York City. On and after March 12, we will legally take the name of Gage.

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1910 Continued

That is the nearest I can get to 'Geg' and I hope my old friends, who knew me as 'Geg' can get used to the change.

"I will have only three more weeks here and during that time I do not expect to be in a humorous mood, so I will have to put the *Mitten* in more competent hands. If you need me later perhaps I will revert to normality after I get to New York, although I expect to be unusually busy getting things organized in the new job. Hope to get up to the Reunion at least for one day, but doubt if I can do more than that.

"My regards to Dick and Charlie and Herb. Glad to hear you have the old gang again as a Reunion Committee. It seems a queer coincidence I should have been in process of moving from Boston in 1916 when we were planning for the Reunion, and having been here ever since am now moving again just as the Reunion gang gets busy again. Does this mean I will stay in New York until 1935?

"Remember that on and after March 12, I am Ralph E. Gage, and that after March 25, my business address will be c/o Mathieson Alkali Works, 250 Park Avenue, New York City. My residence will be Fennimore Road, Mamaroneck, N. Y."

Bob Burnett writes from Oswego, N. Y.: "Our 15-year Class Reunion in June, on which you are now working, will surely be an occasion all of us will wish to attend. I certainly intend to be there, if possible.

"Since I want to read in The Review what members of our Class are doing and where they are located, it is evidently up to me to report my own history up to date as you request. For ten years now I have been located in Oswego, N. Y.; first as Superintendent and for the last seven years as Manager of the Peoples Gas and Electric Company of Oswego. This company is under the management of Charles H. Tenney & Company of Boston. Our family now numbers seven—not counting the cat. We have two boys and three girls. My one claim to distinction (although it is disputed at home) is being the father of the most wonderful pair of three-year-old twin girls. I must not get started on this subject because there is no end to my enthusiasm."

The following comes from Ralph Pope: "In reply to your letter of February 14 asking me for a few lines about myself, I have not very much to say, but I am the President of the Northwestern Leather Company Trust, which is one of the large producers of Colored Side Leather in the United States.

"While at M. I. T. I studied to be a mechanical engineer and since leaving it I have been entirely busy with leather, and all the good I got out of going to M. I. T. was the pleasant associations of meeting the undergraduates. I am, however, a great rooter for the Institute and I am glad I went even if I did not learn anything."

Dudley Clapp, *Secretary*,
15 Draper Avenue, Arlington, Mass.
R. O. Fernandez, *Assistant Secretary*,
264 West Emerson Street, Melrose, Mass.

'11

Gather 'round, mates, draw up your chairs, light your pipes, and give heed to the fact that 56—count 'em—56 Eleveners have to date indicated their probable attendance at the forthcoming 1925 All-Technology Reunion on June 11 and 12. Many will stay over for the 1911 Get-Together at the Manchester (N. H.) Country Club.

56 of 'em—count 'em—56 of 'em! So you see it's going to be worth everybody's while to get back in any way possible, 'cause it's going to be a big Wow of a party. Nuf ced!

Our sympathy certainly goes out to our classmate, Harold A. Babbitt, XI, whose wife, Helen Taintor, died in the Wesley Memorial Hospital in Chicago on Friday, February 27. She was buried in Mount Auburn Cemetery, Watertown, Mass. Harold, who is Associate Professor of Sanitary and Municipal Engineering at the University of Illinois, Urbana, Ill., says he plans to "continue living and working at the same job in the same place, although all of the incentive of life seems to have dropped away."

Here is the news of another "Junior Elevener", for on March 9, at the home of Mr. and Mrs. Fred Harold Daniels in Worcester, the w.k. stork delivered Bruce Goddard Daniels. May he live long and prosper! Congratulations also to Pete Gaillard and his wife on the arrival of their second son, David DuBose Gaillard, II, on November 17, 1924, and again congratulations to Pete on his becoming a special partner in the firm of John L. Edwards & Company, Members of the New York and Washington Stock Exchanges.

A. H. Peycke, II, dropped in to see me at my office at the Institute last month. As General Manager of the Brake and Spring Departments of the American Steel Foundries, Chicago, he came on to Boston to interview some members of the Class of 1925 regarding possible employment with the A. F. Company.

At this writing (late March) your humble Scribe is in the midst of a trip to the local clubs in the Middle West and it is a great pleasure to meet and renew old times with classmates here and there. In New York on March 20 I lunched with Wheatley Lewis, '10, and in the party were Charlie Edwards, Dick Gould, Dick Ranger, and Pat (Frank) Russell, all '11, as well as Doc Wyman, '12. That evening at the Waldorf-Astoria the following '11-ers were present at the annual banquet of the Technology Club of New York: Don Stevens, Pete White (at least I think it was he!), Bill Whitney, Bob Morse, E. M. Young, I, and our Siamese (almost) twins—William Henry Martin, VI, of New York and William Hennick Martin, I, of Philadelphia, the latter being essentially a 1907 man, although he received his degree with us in 1911.

In Pittsburgh I was royally entertained by Bunny (I. W.) Wilson, XIV, and his wife, one of the evenings I was there, and in addition I saw Don Bakewell, II, erstwhile hockey star and now President of the Duquesne Steel Foundries in the Smoky City. Heine (R. E.) Zimmerman, IX, assistant to the Vice-President, American Sheet & Tin Plate Company, was out of town, so I missed seeing him.

In Dayton I had a fine reminiscing party with Captain George C. (Heinie) Kenney, I, U. S. A., who is one of the staff officers at McCook Field. He says he enjoys his work in the Air Service immensely. Liske (E. N.) Fales, II, who is at McCook Field in civilian engineering work, did not attend the dinner held in my honor, so I missed seeing him.

In Cincinnati, I of course saw those 1911 architectural genii, Ed Kruckemeyer and Charlie Strong, who are among the leading "famous pair" architects in the Queen City. They were both there to greet me at the dinner meeting staged by the local club on the evening of March 25.

In closing, may I express the hope that you all have enjoyed reading your copy of the new Register of Former Students, which you all undoubtedly requested. That 1911 line-up makes interesting reading, doesn't it? There are some of our classmates for whom we have no good addresses. If you know how to locate any of these—"Write to Dennie!"

Hope to see you all in June, and above all be on the lookout for the final dope on the 1911 Party at the Manchester (N. H.) Country Club on June 13 and 14, the two days immediately following the Big Reunion.

Orville B. Denison, *Secretary*,
Room 3-207, M. I. T., Cambridge, Mass.
John A. Herlihy, *Assistant Secretary*,
588 Riverside Avenue, Medford, Mass.

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'12

'12 The Secretary's office will soon have to close up for lack of news. I have been sending out fifteen or twenty letters a month to various fellows asking for a reply. None seem to be forthcoming. All will be forgiven, however, if you will write me at once that you are planning to attend the Reunion in June. If we can get enough fellows together, we will continue it over Saturday and Sunday and have a grand good time. Please signify your intentions at once.

Frederick J. Shepard, Jr., *Secretary*,
568 East First Street, South Boston, Mass.
D. J. McGrath, *Assistant Secretary*,
Technology Club of New York, 17 Gramercy Park, New York, N. Y.

D. J. McGrath, Assistant Secretary,
Technology Club of New York, 17 Gramercy Park, New York, N. Y.

'14

'14 So impressed were the Boston Fourteeners with Boggs Morrison's purity talk at the February luncheon, that they demanded more, and Harry Wylde continued the subject at the March luncheon. Both Wylde and Morrison are at Lever Brothers' Cambridge plant and revel amid Lux, Lifebuoy, Welcome, and a few other of the nationally known purity agents. At the conclusion of Wylde's talk all were invited to inspect the factory and everyone present accepted. Had it not been previously announced that such an invitation was to be forthcoming and most of the party prepared for the visit, it is doubtful if many would have stood the strain. Like the glue business it is fine after you become acclimated! It was indeed interesting and the only unfavorable comment came from Porter Adams. Porter stated that after seeing soap made that he would use sand as a substitute in future bathing. Alden Waitt, who is in the Chemical Warfare Service, felt very much at home and recognized the possibilities of every odor. At the luncheon, preceding the visit, Alden refused to eat. It was not until the inspection trip was well under way that the rest of us realized Alden's great forethought.

The luncheon was held as usual at the Engineers' Club but was held three days early, as both the Secretary and Assistant Secretary were out of town on the regular date. Those attending the luncheon and surviving the inspection were Crocker, Adams, H. S. Wilkins, C. H. Wilkins, Harper, Atwood, Blakeley, Wynde, Morrison, Waitt, and Richmond.

While in New York early in the month your Secretary visited

Affel, Hines, and several more of the telephone organization. They all seemed prosperous and appreciated that the fate of the country was in their hands—or rather wires.

A letter from Joe Fish in Japan announces that the General Electric office has been rebuilt and that Joe has moved back from Kobe to Tokyo from which he escaped during the earthquake of 1923. Course VI in particular will be glad to learn that Joe is well up towards the top of the Japanese division of the International General Electric Company. Ross Dickson is back in New York again after his visit to the Pacific Coast. While in Los Angeles he met Carl Sandburg and Jim Holmes.

Sandburg and Jim Horner.
Have you made your Reunion plans yet? The All-Technology events will come on Thursday, Friday and Saturday, June 11, 12 and 13. Fourteen will hold a strictly Fourteen dinner in Boston. It is hoped that every Fourteener will make a special effort to attend this grand Reunion.

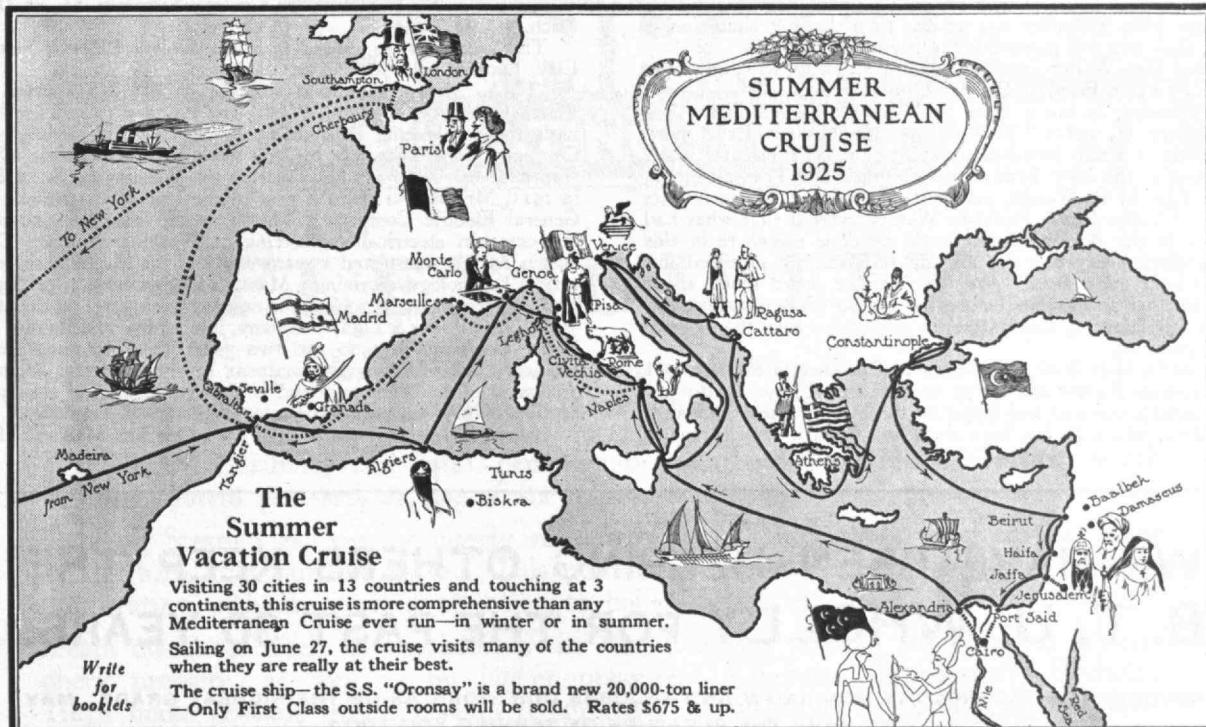
H. B. Richmond, *Secretary*,
100 Gray Street, Arlington, Mass.
G. K. Perley, *Assistant Secretary*,
5 Hill Side Terrace, Belmont, Mass.

'15

'15 No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the May issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in the Review Office. Members of the Class having news or inquiries should address them to Frank P. Scully, Secretary, 118 First Street, East Cambridge, Mass. or to Howard C. Thomas, Assistant Secretary, 102 Floral Street, Newton Highlands, Mass.

'16

'16 No notes have been received by The Review Editors from the Secretary of this Class for inclusion in the May issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in the Review Office. Members of the Class having news or inquiries should address them to D. N. Barker, Secretary, 14 Marathon Street, Arlington, Mass.



The Round the World Cruise

Sailing October 10, 1925, this cruise visits more ports and inland cities than any other cruise. For the first time in history a cruise will stop at Australia, New Zealand, Tasmania and New Guinea. And of course the usual cities in China, Japan, India, Egypt, etc. will be visited. Our cruise ship—the brand new Cunarder "Carinthia" of 20,000 tons—has over 100 single rooms, some 80 connecting with private bath—a swimming pool, squash court, gymnasium. 143 days. Rates \$2,000 & up.

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'17

The Chairman of the Pops Committee for the All-Technology Reunion, Mr. Frederick Bernard, has recently returned from a trip that took him through Chicago, Philadelphia and other towns. Ted was considerate enough to give us the following story of his journey: "I met Ham Wood on the train the other day. He had been in Boston for a couple of days but did not have an opportunity to look up any of the crowd. Ham is a great booster for the insurance business but not so much of a one for Columbus, Ohio, where he is located. Not enough salt in the air out there. The grand and glorious West is ably sponsored though by Penn Brooks, with whom I spent a couple of days in Chicago. I'll bet he wouldn't shed many tears, however, if Montgomery Ward decided to move East. Penn is now a full-fledged buyer in the electrical department of Montgomery Ward. If you want some electrical fixtures and are not too fussy about what you get, Mr. Brooks will be very glad to send you his latest catalogue. If you have to wait too long for a trolley car in Philadelphia, send in your kick to Walt Beadle, Transportation Manager of the Philadelphia Rapid Transit Company. Perhaps he can furnish you a free pass. I know you will be interested to learn that Dudley E. Bell was made Chairman of the Entertainment Committee of the Philadelphia Tech Club. I understand Dud got away to a bad start. He engaged a 'steenth cousin of Pavlava to give a classic dance. Dud's young lady evidently thought that it being a Tech crowd she could do her stuff, but I am informed on good authority that most of the audience were in favor of putting in a call for General Smedley Butler, the guardian of Philadelphia's morals. Dud claims he was double-crossed, which lets him out."

In a recent letter addressed to Ted at the Riverside Boiler Works, this same Dudley E. Bell suggested that, "In your arduous duty of manufacturing boilers, I might suggest that you make a waistcoat for our friend Lobdell, and in such a manner that his physique might be retained in the correct proportions."

Mr. and Mrs. Robert S. Moulton announce the birth of Stephen Woods Moulton on March 16. Moulton is with the National Fire Protection Association with headquarters in Boston.—Enos Curtin writes that he continues to slave as he was taught to in the Institute and that so far he has not rung any bells so loud as to disturb any of the natives in New York. He may ring a few at the annual New York dinner.—Nig Sewall reports a letter from Mrs. Chambers Potts McHaffey stating that she and her husband have just returned from New Orleans, where they have been visiting old friends and taking in Mardi Gras. So far as he could make out from the letter they spent twenty hours of each twenty-four playing golf and dancing. Since Mrs. McHaffey was at one time the golf champion of Georgia, their trip was presumably a driving success.

Mr. and Mrs. Walter Franklin Pond of St. Louis, Mo., announce the birth of a son, Franklin Haviland, on March 17.

The following is taken from the *Marine Journal*, New York City, January 31, 1925: "How Boston Established Her Airport" was the title of a talk broadcast from Station WJY recently under the auspices of the New York Board of Trade and Transportation, by Prof. Edward P. Warner, aeronautical engineer, Massachusetts Institute of Technology. Professor Warner averred that what had been done in the Boston district could be done elsewhere in this problem, which every city not already satisfactorily provided for, sooner or later must face." We have further heard much about Warner and his appearance before the House of Representatives, Air Craft Investigating Committee, in connection with the General Mitchell situation.

Clarence G. Holt is with his father and brother in the bolt and nut business in Boston and living in Malden.—Frank L. Butterworth is factory manager and buyer for the Marion Shoe Company, Marion, Ind., where he has been since last August. His company

makes men's fine shoes. Butterworth writes that the latchstring is always out to Tech men who land in Marion.—E. G. Polley has been at his parents' home in Newton for several months. Previous to this time he was with the West End Power Company at Pittsburgh, where prospects looked very bright, but he unfortunately developed a kidney trouble which brought him home, and he expects to spend two or three weeks at least in the Peter Bent Brigham Hospital.—Al Luan is now factory manager for the National Automatic Refrigerating Company at South Boston, producing the new automatic refrigerating machine invented by Professor Keyes. This is a remarkable machine that has real possibilities.

Frank Charles Howard has received his Master's Degree in course X-A as of 1924; and Haig Solakian his Sc. D. Degree in Course XII.

Carroll C. Smith, who is with E. I. duPont de Nemours Company at Wilmington, Del., writes as follows: "About six months ago I took a position as metallurgist with the duPont Company. As a result my wife and I packed our toothbrushes, and so on, in the rear of the car and left Anaconda, Mont., where I had been with the Anaconda Copper Mining Company, and journeyed eastward. On our way we took in Yellowstone Park, gazed upon the wonders of the Canyon, saw 'Old Faithful' do its stunt, and so on. Through Wyoming and Nebraska we followed the Lincoln Highway which coincides with the Air Mail route. Many of the stations of this service are located miles from any habitation. Wyoming is a country of sage brush and sheep. Nebraska appeared to have a corner on the hay market. As for Iowa, its coat of arms should have corn and pigs prominently displayed.

"Soon after leaving the Mississippi we joined the Old National Trail Highway which gave us a paved road through to the Coast. The reason for the highway being paved is quite plain, otherwise one would never make it at all. Through the Allegheny Mountains there are about 250 miles of just one hill (or mountain) after another and each one tries to outdo the other as regards (1) number of curves, (2) sharpness of curves and (3) steepness. We had about lost hope of ever making any speed when from the top of the mountain a broad valley spread out before us and from then on it was comparatively level. It was really a wonderful trip: the autumn foliage made even the Allegheny Mountains worth while.

"I hope this account may be of interest to some who are contemplating a cross-country trip this summer. If anyone desires more detailed information I would be glad to supply the same."

The marriage is announced of Miss Charlotte Levitan Taubman to Benjamin Morris Bond on Sunday, February 15, at Detroit, Mich.

The following was clipped from the *Electrical World*, New York City, January 10:

"H. L. Melvin, electrical engineer of the Washington Water Power Company, Spokane, Wash., has resigned to affiliate himself with the engineering department of the Electric Bond & Share Company, New York. In his new work he will specialize in power transmission. After graduation from the Washington State College in 1911, Mr. Melvin spent a year in the testing department of the General Electric Company. The following four years he was an instructor in electrical engineering at Washington State College, and in 1917 he completed a year's study at the Massachusetts Institute of Technology, receiving a Master's Degree in electrical engineering. Subsequently he took a position in the engineering department of the Utah Power & Light Company, joining the Washington Water Power Company in 1920 and two years later becoming electrical engineer. Mr. Melvin is prominent in the electrical engineering profession of the Northwest and is a past-chairman of the Spokane Section of the American Institute of Electrical Engineers."

George P. Igleheart writes from the 4-One Box Machine Makers'

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1917 Continued

Company in Rockaway, N. J., as follows: "I have followed the Class Notes in The Review always with interest. I have been just enough off the main roads ever since graduating to have had no contact with Technology men. I have improved the years by marrying in 1918. Since then there have been four additions to the family so I am grooming two boys for Tech and two girls for wherever their mother says they are going. After five years in production work at the Phillipsburg, N. J., shop of the Ingersoll-Rand Company, I came down here last fall as production manager. I believe there are several Tech men living near here and I hope to find them when the new directory comes out."

Chester E. Ames writes, in part, as follows: "After my graduation in 1917 I entered the Army and served as a first lieutenant in the Regular Army in France and soon after my return was commissioned a Captain in the National Guard. After more than two years in the army I entered the engineering department of the New England Telephone & Telegraph Company, where I have been engaged ever since vainly trying to fathom the intricacies through which a single machine switching telephone call passes. By the way, it may be of interest to you to know that there are four other members of '17 in the N. E. T. & T. Company. They are Charley Abels, Hen Clayton, Paul de Mars and Harold McDonald. In regard to the domestic phase of my life since graduation, I have just been married (this is important, please don't omit); and as to the political side, I have served the town of Winthrop in a very important capacity for the last four years as a town meeting member. (I fear I am not talented politically.)"

Raymond S. Stevens, *Secretary*,
30 Charles River Road, Cambridge, Mass.

'18

The last month has been very unproductive as regards information from the members of the Class as to their activities. In the past it has been customary to ask different members of each course to act as course secretaries, so that we have had sub-stations for correspondence. This issue is the next to the last of this Volume in which 1918 class notes will appear. We hope that before the start of the next Volume new men may be found who will be willing to act as course secretaries, so that the job of collecting data and interesting bits of information may be expedited. This also is one of the last opportunities that we have

to remind those who are still in arrears in payment of Endowment Fund pledges that the Class stands low in percentage of money pledged and overdue. Recent information obtained from the April Review shows that of all the money pledged in the drive of 1919 and 1920 approximately 85% has been paid. Percentage of money pledged and paid by members of our Class still stands at little better than 50%. May we have some action on this?

The following information was gleaned from Ken Reid's office: C. E. Linscott has recently joined the staff of the U. S. Rubber Company at Malden.—E. P. Travis is receiving congratulations on being winner of the First Prize of \$100.00 in the last cross-word puzzle contest of the *Boston Traveler*.—George Rollie White has recently joined the staff of C. L. Stevens, Inc., an industrial engineering company, and is located at the Saco-Lowell Shops in Newtonville.—Ed Mead is now with the Nash Engineering Company. He left the Babcock and Wilcox Company at Bayonne, some time ago.

P. W. Carr, *Secretary*,
400 Charles River Road, Cambridge, Mass.

'19

The Class Notes for this issue of The Review are rather short. On account of a large part of your Secretary's family having been sick with the "Flu," this sickness is serving as a good excuse for his not writing more letters to the members of the Class.

The following telegram was received from the New York members of '19, too late to be read at the dinner in Walker Memorial: "Greetings from members of Class of Nineteen. (Signed) Way, Given, Gilbert, Debonneval, Chandler, Rhodes, Rodgers, Rasmussen, Reid, McCarten, St. John."

We wish to extend our congratulations to Bob Bolan who has left the bachelor ranks and has sent us the following announcement: "Mr. and Mrs. Frederic Harold Fay (M. I. T., '93) announce the marriage of their daughter Mildred Elizabeth to Mr. Robert Stuart Bolan on Saturday, March fourteenth, nineteen hundred and twenty-five, Boston, Massachusetts. At Home after May first at Five Chestnut Street, Salem, Massachusetts."

Dick Holingren writes a word about Sam Helrick: "I received a letter from C. Sam Helrick who is out West on a short trip to get some real experience. He is planning to work around laboring or at any other thing necessary to get some real construction experience.



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1919 Continued

A portion of the letter I am enclosing as it outlines the work he is doing and has done. I thought you might be interested. He left last October with a friend by machine using a Hudson Coach and did camping along en route. He is having one whale of a time, I take it." Sam writes, "I don't know just how much of my history I have told you, but I suppose you know that I have been in the employ of the South California Edison Company since December 19 or thereabouts. I spent the first three weeks as a laborer and was then transferred to Camp No. 63 to work as a chairman. For the last few weeks I have been working here in the engineering office at Camp No. 3, where I started in as a laborer. Dick, the work here is fine and living conditions are good, too. I'd be almost content here if the place weren't so blame lonesome and the pay so rotten. Big Creek has a population of about 1000 souls of which 98% are male and the rest married females and children so you can see what a great place this is for a person of my amorous disposition. I have been working on the Florence Lake Dam for the last two weeks, i. e., I have helped figure some of the 4000 points needed for laying out the work. You see this dam is to be a semi-circle multiple arch dam, about 3100 feet long and 150 feet high at the river bed. There are fifty arches in all, abutting on heavy circular buttresses. The dam in plane view is almost a reverse 'S.' You see we have figured layout points for both the up-stream and down-stream faces, using the springing line of the arch and its center-line as the coördinate axes or reference lines. We have taken vertical sections spaced six inches apart from the lower center of the arch to the buttress and found offset distances from the springing line to both the outside and inside faces of the arch for every five foot difference in elevation. You can see what a lot of labor there is to this. This prospect is a very large one. It was started back around 1910 and they don't expect to finish for about fifteen years. The total cost of the whole thing will be around \$400,000,000.00, which is more than the cost of the Panama Canal."

Paul Pochivaloff, who took special professional work in the Mining Department, has been located around San Francisco during the past few years, and has become established as a manufacturer of synthetic flavors and essences, under the name "Murray Products Company," at 3814 Grove Street, Oakland, Calif. This enterprise has grown to the point where a consolidation is under way with a related concern. It will be incorporated under the name of Universal Flavors and Syrups, Inc.

I think some of you Course XV men had better stop down in

New York and see what sort of mischief Amos Prescott is up to. He says, "Am busy at work in the family business making stove polish. Find Tech training very helpful and believe our plant would be given a pretty good report by an inspection made by Course XV."

Frederick J. Rasmussen has changed his address to 199 Walnut Street, Montclair, N. J. We understand that Reginald Stuart Hunt received his Ph.D. in 1924. Good work, Hunt.

Paul F. Swasey, *Secretary*,
Box 1486, Boston, Mass.

'20

The voice from the dead! I can see in my mind's eye the razzing I'll get when you all see me at the Five-Year Reunion at Plymouth. I hope you all will have received the announcement and plans before this goes to press, so this will be merely an afterword to keep the ball rolling. I shall expect the mails to be flooded with the return post cards telling me of your expected presence. If the Mayflower Inn doesn't ring with 1920's hilarity, we'll all be the losers. Your presence is going to give the "other fellow" just so much better a weekend, crammed full of good times, and give us all the chance to talk over the many things that have transpired in our first five years out of the old 'Stute.

Now for a few of the happenings since last you heard from me:

Marriages! Oh, yes! Jimmy Wolfson stepped off December 24, 1924, with Miss Gertrude Ednas.—Gerry Tattersfield was married October last to Miss Doris Nelson.—Robert Warriner was married in October to Miss Winifred Wright of London, England.—I had the pleasure of being present at Jimmy Gibson's wedding in February to Miss Lucy Cheney of Brookline. The engagement of Charles Caldwell to Miss Ada Thomas was announced in January.

To pass on to the benedict, Heinie Haskell announces the arrival of Muriel Storey Haskell on November 5, 1924. Hobart Davidson boasts of Amy Jane Davidson, born March 5, 1925. Lee Wilson is now the proud father of two children, Leland David Wilson, Jr., having arrived October last. Mrs. Ridgway took pity on me and wrote me the following note some time ago which I insert in full: "It pains me to see a large vacancy in the space assigned to 1920 in The Technology Review. You present a sad spectacle—a scribe without a line to scribble. I'll give you one—Charlotte Ridgway was born on September 4. Her father was a little disappointed that he could not name her for himself—but he got over it, and she will be the most beautiful co-ed in all Technology's career."

And now to pass on to the less momentous events in our history. I received a note from Henry Murphy at Christmas time written from Bombay as follows: "Just a line to pass on the seasons' greetings to you and to let you know that the East hasn't eaten me up. I have been stationed in Aleppo, Syria, for the past eight months, and being due a vacation I slung a pack over my shoulder and set out for Der Zor, Bagdad, Babylon, Busra. When I reached Busra, India seemed so near and so fascinating that I decided to continue, so I have had a great week in Delhi, Agra, and Bombay. I regret that vacations aren't made of elastic, but as they are not, I am taking a deck passage tomorrow for a week's sail up the Persian Gulf to Busra, from which I shall go on to the ruins of ancient Ur, and then to Bagdad. From Bagdad I have a week's journey across the desert to Aleppo. I have had a glorious four years out here, but shall be glad to get back to hear my own tongue spoken and to where they wear clothes instead of a coat of tan."

"Give my greetings to '20. To you I send my best wishes."

Albion Doe has been in the spotlight with a talk at the Kiwanis Club in Hoboken. He expounded on Shades of Course XV, to the effect that the management of our life was the cause of numerous ills. "Too many watchmen have become lawyers, and too many plumbers have become singers!"

J. P. Morgan writes me another letter from Beaumont, Texas, deplored the Class Secretary's silence, which of course is agreed upon by all! Next!—Pete Ryer has returned to Boston and is now affiliated with Lever Brothers in Cambridge helping make the world a clean place to live in. Shades of Lux!—Scotty Wells is now in North Chelmsford with the Fletcher Granite Company.—Bunk Talcott is in Boston with a bond house and receives his mail at the Gralyn Apartments.—Skeetz Brown is still in Mexico, dividing his time between refining ore and dodging Mexican lead!—A few of us got together at Louis' Café for a dinner in February to talk over the Reunion. Those present were: Norry Abbott, Pete Ryer, Ev Freeman, Johnny Nash, Buck Clark, Jimmy Gibson, Jack Kellar, Harold Bugbee, Bunk Talcott, and myself. Louis' was not like the old days, but some one took pity on us and supplied the spirit for the occasion and it didn't come from Boston. Go ahead—figure it out who was our benefactor. Now Jimmy lives in Boston,—so do I—Oh! well, I promised not to put this in The Review so I will be true to my word.

As a final parting—don't forget the Mayflower Inn date you have for June 13 and 14. The gang will be there, so don't lose out on it.

Kenneth F. Akers, *Secretary*,
54 Dwight Street, Brookline, Mass.

Wilson

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'21

No notes have been received by The Review Editors from the Secretaries of this Class for inclusion in the May issue. The Secretary received the usual notification that copy was due, accompanied by such news as had been compiled in the Review Office. Members of the Class having news or inquiries should address them to Raymond A. St. Laurent, Secretary, at 431 Oliver Street, Whiting, Ind., or to Carole A. Clarke, Assistant Secretary, Northern Electric Company, Ltd., 121 Shearer Street, Montreal, Que.

'22

The details of the Nineteen Twenty-two Barbeque, scheduled for April 17 in Walker Memorial, concerning which first notice was given in these columns in the April Review, are rapidly crystallizing. Unfortunately, from the journalistic viewpoint, the event can't be covered in this issue, for which copy must be written in late March. By the time these words see type, however, the eventful evening will have come and gone. Advance press agent stuff is therefore inappropriate, and a *post hoc* is impossible—or at least unwise. The best thing to do seems accordingly to fall back on what is probably the English equivalent for the Greek Aorist Tense and say that, as you read this, the evening will have-turned-out-to-have-been a Great Affair. Those of you who missed it, however, should console yourselves with the tear-drying thought that in a sense the meal was only preparatory—its function having been, aside from giving mental and physical nourishment, to determine the Class rôle in the forthcoming All-Technology Reunion on June 11 and 12. Since there is no Review in June, it will be up to the Secretary to give news of it and of the special class functions that will take place at the Reunion to everyone either by a special Class Bulletin sent out after the event or via *The Boomerang*. It will be done. Please watch for the news, and complain loudly if you don't get it.

And that reminds us. (It really doesn't, at all, but it's convenient to pretend.) The "complain loudly" stop is one that we feel more or less forced to play on for the next few moments, and we ask you to keep your seat regardless of how well you care for the Stravinskish disharmonies we are likely to produce.

It was only two months ago that we were passing out verbal cigars to everyone because of the copious and extended notes that were being sent in for '22—rich, vital, human-interesting. The words were scarcely in type before there came the woeful slump of last month, with only a column or so of representation, and materially less than that of news. And now, this month! Look below our signature, and see—nothing. A sheer drop of three thousand feet, to the jagged cliffs below.

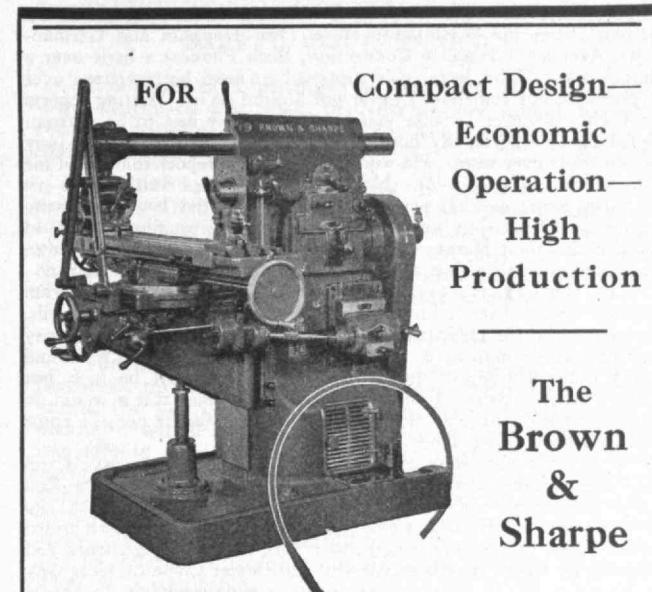
It won't do, fellows. We are rapidly sinking to the level of the Class of '21, and something has got to be done to stop us. My suggestion is that we start the doing right away.

Whose fault is it? Everybody's. A good deal of it is mine. I have not written as much as I should have. I have let more than one good news tip slide because there seemed more trouble involved in it than I thought I could take. In other words, the words of the Litany, I am a Miserable Sinner.

But so are you. Don't for a moment get the idea that I have turned Christian to the degree that I want to absolve everybody else. This is a blanket indictment, and omits no one—particularly not the Course Secretaries, who are getting as fat and lazy as the medieval monks. But even so, all the blame does not rest with them. The individual course member is pretty stingy with his news, and not much inclined to make the secretarial job interesting by taking the time to write an occasional letter. It is certainly not much of a chore to write a letter to your Secretary once a year, and yet there are literally hundreds of men with some affiliation to the Class who have never been heard from since graduation. Some of this silence is due to modesty, laudable, but misplaced. Most of it is due to a lack of the requisite voltage to jump a spark of news further than across the street. It ought to be pretty easy for us, if we make up our minds, to throw in a few more stages of audio amplification, pump a few more calories into the plate circuit, and make a few other changes in hook-up for the achievement of more volume and distance. (Alter the terminology to suit your course.)

In all seriousness, we've got to make a change. The Class has been reasonably good in the reporting of short items of news, but one thing that has been missing, and been missed as well, is the long letter from the chap in the hinterlands. In every issue of The Review there are usually three or four of these, and they make fascinating reading quite aside from any interest in the writer as a personal acquaintance. We've never had one in the '22 notes, and we ought to have a dozen a month. Around these as a nucleus there ought to be twice as many short notes of new activities and the like as there have been heretofore. A small effort on the part of everyone can put us where we belong: in the van of the procession, with the longest and most interesting notes in The Review. Let's snap out of the doldrums.

Well, that's about enough of that. In line with my own promise to hit the sawdust trail leading to bigger and better notes, let me see what I can dig out of the Class Wallet in the upper left hand drawer.



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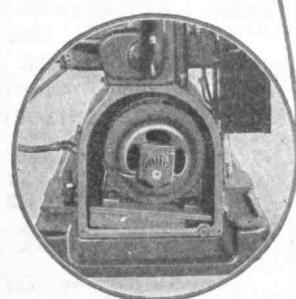
These machines offer a very compact and efficient production unit. The motor is completely enclosed in a compartment in the base which protects it from oil, chips, dirt, etc., and in addition saves valuable floor space. Ample provision is made for ventilation as louvres set in the sides of the compartment assure a constant circulation of air.

The design of the motor base affords a ready means of removing the motor whenever desired by merely sliding it out in its adjustable ways.

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1922 Continued

First of all, here's a letter from Erb Ditenhofer, written in Philadelphia, from the Washington Hotel (7th, Dauphin and German-town Avenues, Garage in Connection, Both Phones) a little over a month ago. "This letter was supposed to have been written over a year ago, but somehow I never got around to it. Writing reports at Tech was easier because you knew that they had to be written. Speaking of reports, my boss is a bug on them — worse than any of the Profs ever were. He would rather get a report than bawl me out, which is saying a lot. Now that I've started writing, I'll try to finish before another year passes. Not only did I want to write on my own hook, but was commissioned by the unanimous vote of 75% of the 'Four Horsemen' to report for them. This was written to make you realize that there is someone lazier than myself.

"By the way, the first thing I tried to forget after graduation was our mutual friend, Triple E, and the rest of the electrical devils. Consequently, the principal thing I have done in an engineering way for the last six months is to play with power factors, KVA's and many other heathenish units. Retribution may not be just, but believe me it is swift. I am now a hardened sinner and it would do your heart good to hear me tell a G. E. man that he doesn't know what he is talking about.

"I haven't met many of the fellows since X-A broke up. I run into Brod Haskell occasionally in New York and see Charlie Roll quite frequently. When last heard from about two months ago he was engaged. He hasn't changed a bit. As far as my own crowd is concerned there is very little to report except engagements and marriages. Roger Ingalls is still with the Zinsser Chemical Company of Hastings, N. Y., but now as assistant superintendent in charge of dyes. He was married the February after graduation and now has a year-old son, being pointed for Tech. Bill Taft has been working for the National Sugar Refinery Company at Yonkers for over a year and has just announced his engagement to Miss Constance Hearne of Swarthmore. Eddie Koehler left the United Piece Dye Works about a year ago and since then has been connected with the Schulte interests. At present he is with Vivadou, Inc., making perfumes, and so on. He was married last July to Miss Phyllis Beer of New York.

"In order to be original I have remained single and completely unattached. Such originality should be refreshing after reading the pages of The Review. I have been with the Gotham Silk Hosiery Company of New York (strange with that name) since graduating

and have been over here for about a year as assistant superintendent for about the last eight months. I use some chemistry, some engineering, but principally find the Tech training very valuable. I hope to be moved to the New York offices in the not too distant future.

"I got in touch with Bill Stose over here the other day, and we both hope you get a chance to come over later on as you promised."

That's what we call a friendly letter. Contents guaranteed, save for the spelling of proper names. Those of you who know Dit's calligraphy will appreciate the difficulties under which the transcriber worked.

Bill Stose, he who was got in touch with, wrote some few days earlier from 2044 Chestnut Street in the same metrop. Says Bill: "I am now with the Atlantic Refining Company, Eric, my boy, and my first day's duties (namely today) have been very simple. The hardest part was to get there on time, as I have to start in at an ungodly hour. I won't name it for fear of making you jealous. At present I am getting the hang of things and picking up all the information I can preparatory to development work on a new type of still. The work will be outdoors for the most part, and on the semi-plant scale you may once have heard of. Right at present it is not such a hot job, but considering that they expect to equip the whole plant with this new type of still, it offers a good future.

"I have seen Dex Shaw twice since I got here and he seems to be prospering with a firm of patent lawyers as a sort of chemical and engineering advisor. Looks like a good job. The lawyers usually collect the cash. There are several Tech men at the plant, but none of our class, or that I know very well."

One of the most interesting events of the fiscal year occurred a few days ago, when Doctor Arthur H. Fischer called upon us. The assiduous will penetrate under this disguise the features of him who was Art Fischer, V, the Herr Geheimrat of Providence, analyst extraordinary in our billhall days and later, as well, Lord High Piano Player in more than one Tech Show Orchestra and similar official in the Walker Memorial Lunchroom Six, when membership therein was an honor and not a disgrace. Art is a Doctor of Philosophy now, from the University of Berlin, and has come back after two and a half years abroad jammed with yarns and theories as well as learning. He did his thesis on a problem which lay half, apparently, in colloidal-and half in bio-chemistry. The Gensec who would never, in his most scientific days (which are long ago), have dreamed of tackling either of these goths separately, was reduced to speechlessness by the thought that a classmate had gone out and slain them both together, and is now of the opinion that Art is in direct line of descent from Emil. Art and your correspondent settled a great many matters that were extra-scientific and feel that they have the universe pretty well tuned up, with the carbon out and the valves reground. Not that they disposed of everything. Art is long and time is fleeting, so that the Gensec is looking forward fondly to another session in the near future.

Another caller of an earlier era was Walt Lennon, X, temporarily returned to civilization from Adams, Mass., where he is with the L. L. Brown Paper Company. "With" isn't the word. Leave it out and the sentence is better. Walt is now plant superintendent, having been with the concern since graduation. He looked highly prosperous, and related that his two latest exploits were building an addition to the plant and breaking his ankle. No permanent ill effects from either.

I am afraid that nothing will convince Walt that he was not the victim of misrepresentations. "I understand" said he, having read the February Review with a thoroughness that should be a model for everyone, "that you have some good cigarettes here." I could feel the pallor of death creeping over what have sometimes been referred to as my features. I had exhausted the supply only ten minutes before, and was taking a chance that no one would pick me up on the invitation in The Review until I stopped at Eddie Pung's after lunch. It seemed a reasonable chance. Then, in came Walt. No one near the Review Office smokes cigarettes — pipes, cigars and Camels being the major articles of commerce. There was nothing to do but struggle to convince Walt that it was All a Mistake. To this day we don't know if he believes us. Walter, it will never happen again.

In the Brief Mention class, there are still a few items left. Bill Rich and Ray Miskelly, both X, are back at the Institute for further study . . . Your Scribe saw Johnny Strieder and Amos Henry Stevens, both VII (but act old for their age) at a recent dress rehearsal of Tech Show . . . Lewis Tabor, X, Master of Science and Natural Philosophy at the Protestant Episcopal Academy, Overbrook, Pa., was a recent caller. He was in town ahead of schedule because the school had tampered with the Easter vacation since the College Board exams came earlier than is usual, and Easter is fairly late. As an alumnus of the Academy, we protest. Things have come to a strange pass when Easter can't be reckoned by the Golden Number any more. In our day, if the College Board had tried to crowd Easter, Old Nifty would have picked it up in his bare hands and chucked it so far that a man couldn't take his entrance exams until he'd been out of college three years. Them was

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1922 Continued

the days . . . Parke Appel, VI, made his annual call on the Gensec a short time ago, in course of his yearly persuasion of seniors that the New England Telephone and Telegraph Company is a good concern to work for. Certainly, we'll say the personnel is loyal. For eleven months now it (all of it) has been loyal to the idea that we owe the Company \$3.43 for mysterious toll calls from the Haymarket exchange which was made thirteen days after we had left Boston on our summer vacation. But we don't owe it. We don't, we don't, we don't, we don't! (Business of total breakdown into hysteria, with bitings of radiator, and so on.) We didn't mention this to Parke, but if he ever reads these lines we wish he'd help us out.

Bad news has come to us of Fearing Pratt, VI. A severe case of grip developed into pneumonia, and as Fearing was recovering from this, a peculiar infection of his jaw set in, which necessitated an operation from which he is now, we hope, recovering satisfactorily. The sympathy of the Class of course goes to him most sincerely, but these messages always count for more when they are written directly. Fearing's address is 120 Main Street, Hingham, Mass.

Apparently, ill health also claimed Hugh Shirey, now, however, recovered. We have had no direct word, but a notation on a card returned to the Alumni Office from Hugh reads "Just received this—being forwarded. Also, just had operation. Am with Curtice Bros. Company, Canners and Preservers in Production." His address is now 20 Curtice Street, Rochester, N. Y.

Ranny Haigh, XV, who is with Bachrach in Detroit, where he is District Manager, dropped in about a month ago. If the city is planning to resume diplomatic relations with The Review, let it be said that it could pick no more able ambassador than Ranny, nor one more acceptable. His address is 214 Book Building. Another caller, but one whom we missed seeing, was Harold Bull, II, now in the Engineering Department of the Griscom-Russell Company who are, says the card, "Engineers and Manufacturers—Land and Marine," at 90 West Street, New York City.

Now, then, have we succeeded in demonstrating that we mean what we say? We haven't written so much for the notes since Norbert Wiener sat on us. We are willing to keep it up, but we must have coöperation from everyone. This job gets pretty dull when no one writes anything from which copy may be made. Write, darn you, write.

Eric F. Hodgins, *General Secretary*,
Room 3-205, M. I. T., Cambridge, Mass.

'23

May is here and June draweth nigh. Plans are well underway for one of the greatest events in the history of the Alumni Association. We are hoping and expecting '23 to turn out en masse. It will surely be worth the while, and remember this is our first reunion. Preliminary plans promise one of the best times imaginable for all. Make your reservations early. Incidentally, we have just one more Review issue before the summer.

Robert E. Hendrie, *General Secretary*,
12 Newton Street, Cambridge, Mass.

Course I

The reason for the scarcity of Course I notes this month is that Sailor Dresel, who was preparing some dope for us, made rather a hasty trip to the hospital to have his tonsils removed. We haven't as yet heard from him but trust he will be back on the job at the 'Stute in a day or so.

P. S. Rice got tired of his job with Stone & Webster so deprived them of his services about the first of March. The last word from him was a promise to write as soon as he reached Chicago, where he was going to join the Maintenance Department of the Pennsylvania Railroad. That was nearly two months ago, and we are anxious to know how this job compares with the maintenance job he had as section hand on the Boston and Albany. What do you say, Bum, let's hear from you.—Unity Chase and Bob Hendrie are still doing their best to help the New England Telephone Company put over their rate increase.—For the rest of the Course I dope, we will have to wait till next month when Sailor is back on the job.

J. M. Robbins, *Secretary*,
42 Oak Street, Belmont, Mass.

Course VI

The Secretary meant to have a slew of notes for this issue but his good plans miscarried somewhat. Perhaps it's not all his fault. He tried to communicate with several well-remembered brown-baggers and found the birds flown. Whither we wot not, but when this new directory of former studies comes out it'll give us the grandest line on those still alive.

Brother Dennie, the Alumni Secretary, is all agog to know how many VI men are resting easily enough to take in the big Reunion in June. Fortunately some of the boys didn't get farther than Cambridge or Boston and can stand up for the rest of us.

If you'll pardon a personal mention, it is that the Secretary is exploiting his wares as instructor in the Moore School of Electrical

GOOD LIGHTING OF INDUSTRIAL PLANTS SECURES SAFETY AND EFFICIENCY.

The Code of Lighting for factories, mills and other work places of the State of New Jersey makes excellent recommendations of daylight for the proper lighting of industrial buildings.

Adequate daylight facilities through large window areas, together with light, cheerful surroundings, are highly desirable and necessary features in every work place, and they should be supplied through the necessary channels, not only from the humane standpoint, but also from the viewpoint of maximum plant efficiency.

Importance of Daylight.

The unusual attention to gas and electric lighting in factories, mills and other work places during the past few years; the perfection of various lamps and auxiliaries, by means of which an improved quality and quantity of lighting effects are obtained; and the care which has been devoted to increasing the efficiency in various industrial apparatus—all go to emphasize the many advantages and economies that result from vital and adequate window space, as a means for daylight in the proper quantities, and in the right direction during those portions of the day when it is available.

Three Considerations.

Three important considerations of any lighting method are sufficiency, continuity and diffusion, with respect to the daylight illumination of interiors. Sufficiency demands adequate window area; continuity requires (a) large enough window area for use on reasonably dark days, (b) means for reducing the illumination when excessive, due to direct sunshine, and supplementing lighting equipment for use on particularly dark days, and especially towards the close of winter days, (c) diffusion demands interior decorations that are as light in color as practicable for ceilings and upper portions of walls, and of a dull or matt finish, in order that the light which enters the windows or that which is produced by lamps may not be absorbed and lost on the first object that it strikes; but that it may be returned by reflection and thus be used over and over again.

Diffusion also requires that the various sources of light, whether windows, skylights or lamps, be well distributed about the space to be lighted. Light colored surroundings as here suggested result in marked economy, but their main object is perhaps not so much economy as to obtain results that will be satisfactory to the human eye.

Requirements for natural lighting:

1. The light should be adequate for each employe.
2. The windows should be so spaced and located that daylight is fairly uniform over the working area.
3. The intensities of daylight should be such that artificial light will be required only during those portions of the day when it would naturally be considered necessary.
4. The windows should provide a quality of daylight which will avoid a glare, due to the sun's rays, and light from the sky shining directly into the eye, or where this does not prove to be the case at all parts of the day, window shades or other means should be available to make this end possible.

As will be noticed in the above recommendations, large windows and proper diffusion of daylight are urged, in order to meet the demands of daylight lighting.

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If interested in the distribution of light through Factrolite, we will send you a copy of Laboratory Report—"Factrolited."

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1923 Continued

Engineering, University of Pennsylvania, and what a grand old job it is. Dr. Harold Pender, author of the E. E. "bible" and a former Technology professor, is head of the school and is the best leader imaginable.

Besides classroom and lab work, Yours Truly is embarked on a radio investigation, preparing a radio map of Philadelphia by measuring the strength of waves from WFI, at various points in the city. A super-heterodyne mounted in a brand-new Ford does the trick.

The A. I. E. E. Students' Branch convention held here recently proved a whaling success. Farley Osgood, '97, President of the A. I. E. E., was the chief speaker and gave out lots of fatherly advice on when to get married, and so forth.

It appears there will be only one more chance for notes until next November. By that time we hope a good bunch of the men will have wiped the flux off their faces long enough to look around and perhaps give us a few KWH of hot-shot for these columns. And if anyone has invented a unity-power factor generator or a popular definition of wattless component, do let us know about it.

Albert J. Pyle, *Secretary*,
Moore School of Electrical Engineering, Philadelphia, Pa.

Course XV

All the Course XV bunch must be go-getters. They seem to be too busy making history to write it. I know my own inclinations, now that the time is here for dirty work and lots of it, are to cut out everything not absolutely necessary. Lots of the boys figure, "Who wants to hear that I've still got an appetite and am working like the devil? And then they wonder why the secretaries don't have more dope. Anyway, here's something fresh in the gossip of the day.

Our Class dare-devil, R. W. Fox, has taken the big chance and now proudly announces that Mr. and Mrs. R. W. F. will be at home after February 15, at 183 Woodside Avenue, Newark, N. J. The lady's name was Miss Minerva Benzing. Congratulations from the bunch and best wishes! He has been working for the Public Service Production Company, of New Jersey, and for a year was on the new Kearney Power Station in field work and is now assistant to the superintendent of construction.—P. L. Coleman is with the commercial end of the same company. Other Tech men in the same company are Dean, Thimme, A. W. Hawkins, Hobson and Nesmith.—Art Smith was seen in Buffalo traveling for his father's concern. If he'd declare a dividend and report in on a post card or letter, he'd get a better write-up.—Bill Vicinus has been made a member of the firm of contractors, Whitmore, Ranbu and Vicinus and is on

the board of directors. Bill looks healthy, happy, and is trying to be the business man in Rochester. Great stuff and more power to you, Bill!—We think that any year now Ted Nesbit, George King, Ken Kingsley, and Doc Murdock are going to declare an extra dividend and a holiday and drop us a line on general social and economic conditions in their respective hang-outs.

It's all right, boys. We must have space representation and what can't be hot dope must be hot air. Play that over on your radio!

Edmund H. Miller, *Secretary*,
547 Lake Avenue, Rochester, N. Y.

'24

Let us see now! The first thing to talk about this month is the impending All-Technology Reunion. I imagine you have all seen by this time copies of *The Boomerang* which gave you all the details of what is going to happen at the Reunion and when it is going to happen. No doubt that organ also sold you on the idea of buying a ticket to Boston. Is there any need of my going into further detail regarding what is going to happen? Perhaps some of these engineers who got stuck way down in Georgia or way up in Minnesota and Michigan (I don't dare include California in this category for fear of being sued by some fruit growers organization in that territory) will, to return to the subject, need a little more coaching, so I'll tell a little about what 1924 will do.

Nineteen twenty-four will be there and there strong if the banquet which was held on March 2 is any indication. At said banquet fifty members of the Class attended but I'll tell you all about that in a couple of moments. After considerable thought upon the matter it was decided that it would not be wise to plan anything in particular for the Class to do after the big show is over. But we will be noticed, I can guarantee, since none of you have seen Bill Robinson, our deacon, let a chance go by to sing the praises of 1924 to the world in general. We will have many chances to congregate at the dinner, the picnic and other times. So just watch for our banner and listen for the good old 1924 cowbell which has now proclaimed the presence of 1924 at three banquets, the Class in June, the Alumni in January, and the get-together in March. The Class has been honored by being asked to furnish the ushers at President Stratton's reception. Now is there anyone among you who is in doubt as to whether our Class will be occupying a place on the stage or not?

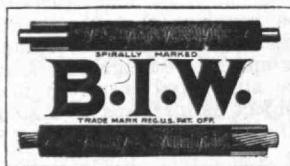
From all of which it appears that there doesn't seem to be much reason for anyone to stay away. Of course there is the little matter of a vacation from the job (position) and the question of train fare, but what good is four years at Tech if we can't fix a few little things like that up? Now I wonder if I've said enough to make everyone want to come. Maybe you are stuck in Arkansas in which case one might need a little more urging, so if you are stuck in Arkansas (or any state outside of New England) I will be only too glad to forward you a list of reasons upon the receipt of your name and address.

About time I said something about that March 2 get-together. The walls of old Walker rocked as the Class of 1924, fifty strong, sat down to dinner with a lusty cheer. Bill Robinson officiated with the well known cowbell. After the demi-tasse each member arose and gave a short account of himself. We pulled the time limit on Archie Carothers, when he got up, knowing him of old. Many and varied were the secrets disclosed. The one and only original "fungus" was disclosed as Harold G. Young, XIII. Several spicy stories were given by John Holden, Sid Doyle, Phil Cohen and Chick Kane. Edison and Stone and Webster rivalled the Institute in claiming our fair sons. Duffy of greased-pig fame was conspicuous with his genial smile.—Jerry Dalton recently returned from Havana and looked the part.—Tom Bundy's houses all caved in during the earthquake.—Ray Lehrer is even going to Harvard but thank God there are no Physics instructors among us. Bates and Blake, the Biology twins, are testing bacteria and anatomies. Charlie Frank was celebrating, having just passed in the old thesis.

A silent toast was offered our departed classmates Stevens Bromley, George Swartz and Lloyd Parker. Some remarks were made concerning the Endowment and the Reunion, after which the "Scandals of 1924" were shown. Not satisfied with ousting the joint meeting of the Faculty Club and Alumni Council from the Faculty and Alumni room and interrupting their meeting with cheers and more cheers, we concluded by singing Prof. Passano's Prize Song for 1925, Elmer Brugmann leading and Gordon Harvey at the piano. This was the first time the song had been sung. [sic!]

Then we adjourned to Ed Pung's Bowling Alley and proceeded to give the pin boys an easy although somewhat interesting night, when Jerry Dalton started sending pins all over the alleys. Seven men passed out when Charlie Frank got a strike which gave him a total string of 57. He and Chick Kane were fighting it out for the Booby prize after the others had departed. Perry C. Maynard won the prize of one carton of Fatimas with the good score of 108. According to a previous agreement he split with Bob Lindsay.

It is a pleasure to announce that John Holden is now taking care



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1924 Continued

of the secretarial duties of Course XV. I know it will particularly please you fellows of XV as much as it pleases me. Give him your support and just see what he has contributed this month.

I had a letter from one fellow the other day in which he objected to some statements in The Review concerning him. That's what I want you all to do. If it doesn't please, say so. He added a few notes to his letter which makes me willing to accept your complaints because I can then get more material for a future number. Just another way of saying "Write."

I had to make up this month for next, when there won't be a Review but now I guess you can go on to those who know more in particular about things and people.

Harold G. Donovan, *General Secretary*,
80 Farmington Avenue, Hartford, Conn.

Course I

No doubt sundry of you One-ers have been giving me a strenuous bawling out due to the fact that in the issue of The Review which you received on or about March 15 there was nary a smell of our dear beloved course. But as I live and die it was not my fault. I sent Donovan five pages of the purest and most unadulterated virgin bunk that was ever inscribed by a typewriter. For some unknown reason he didn't see fit to print it. If the rigorous censor who holds forth over these literary efforts doesn't repeat and relax pretty soon, I'm going to hand over this job to Ed Jagger. He's the one that sicced it onto me, doggone his hide.

Well, the Secretary business is picking up in Minnesota. I'm right pleased to report that I have corralled four more of the "missing battalion." Such are as follows: William H. Correale, Russell W. Ambach, George M. Tapley and Walter H. Kennett. Bill has been proving that the pen is mightier than the sword by pushing said implement in the employment of the Electric Bond and Share Company of New York City. That company, by the way, owns the outfit I work for hook, line and sinker. I'm hoping Bill doesn't get too rough with me. Russ and Tap are working for the Alabama Power Company, Birmingham, Ala. The Ala does not stand for Automobile Legal Association; it's some southern state. Walt is also recent recruit of the same company. Russ seems to be their secretary for he has written me the news, snatches of which are as thus: "George Tapley and myself are in the Engineering Department working under a Cornell professor on leave of absence. Walt Kennett dropped in on us about two weeks ago, applied for a job and was immediately set to work on Trans Lines in charge of a party setting out tower bases." Russ also mentioned that Doug

Elliot and Oakley Charlton, a couple of '24 men from no-account courses, are also working for the Alabama Power Company.—Bill Correale wrote that he had seen Ed Wininger in New York.—Ed is working for some building construction outfit. I can't remember the name of the firm and I haven't Bill's letter with me as I write this so I'll have to leave it for next time.

Well, gang, keep up the good work. If the news continues to come in as it has this last month, we ought to be able to make the rounds by the twenty-fifth reunion.

J. D. Fitch, *Secretary*,
Minnesota Power and Light Company, Duluth, Minn.

Courses III and XII

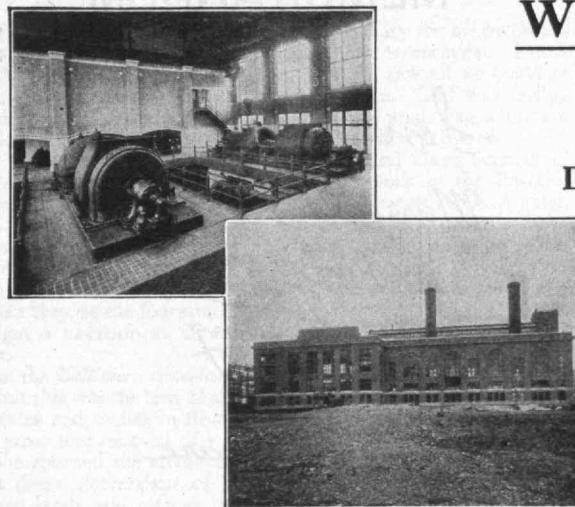
After an extended silence, superinduced by a shortage of news, the writer felt obliged to make a special effort at this time. Furthermore this is an opportune time to remind all who may read that the premium on the Endowment insurance falls due within a month. Let's have 100% payment in Courses III and XII!

Another matter for your consideration is the coming Five-Year Technology Reunion, June 11 and 12. Those of you who plan to be in the vicinity at that time should not fail to sign up, for a big time is to be had by all. Send your reservations to O. B. Denison, M. I. T.

There is still a tendency on the part of members of these Courses to remain exclusive. Only a few unsolicited communications have been received from the worthy classmates, hence the scarcity of news. Surely some of you have been inspired by the great open spaces. Let's have your impressions.

Fultz Hooper, XII, crashed through with a brief note, as a result of his righteous wrath at being wrongly classified in previous issues as of Course VI. He says, "Think it's up to you to move my name away from the Course VI crowd and the Western Electric and get it into the 'hard-rock miner' crowd at Bingham." Your humble servant had no part in this grave indiscretion, Fultz, and I make haste to apologize for allowing it to escape my attention. Professional pride with a vengeance, eh what! Fultz is with the Utah-Apex Mining Company, at Bingham Canyon, Utah, with George Holmes and Al Lindsey. His optimism after all these months is refreshing and leads me to believe that those of us not out at Bingham Canyon are missing something.

Another long lost associate, Bob LeClercq, XII, favored your Secretary with a most interesting letter written from the dark depths of the Belgian Congo. To quote Bob, "Of course, I consider you darn lucky to be in Boston; especially so to-day, with a go of fever,

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1924 Continued

and the rain outside coming down by gallons. I am here for the next three years, as Mining Geologist to the Union Miniere du Haut Katanga or more simply, U. M. H. K. This place is a pretty nice paradise (in a purely geological sense). Thousands of miles of unexplored country, and a very large corporation owning the whole countryside. However, being human, I am longing for the happy days in Boston. . . . Did you ever go into an old-fashioned mid-western town? That is about the sort of place I am in. Going into the 'bush' at times and working at the office the rest of my happy days. This camp is quite cosmopolitan, Americans, English, French, Belgians, Russians, etc. . . . I have the good luck of having here with me P. C. Putnam, '23, and his wife; we took our contracts together and left New York last September. We expect to get back in 1927, and as far as I am concerned, I shall stay quite awhile in Boston before I start looking the world over from another angle. Write to me some time. Letters are appreciated out here." Bob further mentions that he intends taking a Master's Degree when he returns.

My suggestion to those of you who have the time is that you drop Bob a line, for I am sure he will be more than pleased to hear from you and glad to enlighten you on any phase of African civilization in which you may be interested. Just think of the new stamps for your collection. His address is c/o U. M. H. K., Likasi, Panda, Belgian Congo (via Cape Town).

I may say that my address continues to be as below; I am staying in Boston throughout the Summer, so fire away. All communications gratefully received.

Here is a letter from the Assistant Secretary to the General Secretary of the Class:

"I have just received your reminder that news is due for the May issue and as there is no time like the present, here goes. Most important of all is the fact that Ray Meade is engaged. If we didn't know his sweet lady, we might say that another good man had gone wrong; however, as it is, we think him luckier than the most of us.—Sil Massari, who is now down here with me, hopes to get in line with Ray soon, and with George Holmes already in line, it will only take one more man to fill up the front rank. What do you say, Tatty?

"Weston Pratt continues to instruct humble undergraduates. He expects to stay another year at Tech and then will venture out into the cruel world.—George Holmes and Al Lindsey are still at Utah-Apex Mining Company, Bingham Canyon, Utah. 'The Call of the

Wild' proved too strong for them so they had to revisit their haunts about Back Bay at Christmas.—Don Kennedy and Hugh Craigie are still throwing the bull in Mexico. Don's line surely goes over big with the fair señoritas.—Dick Jackson and Al Renfrew are continuing their studies at the 'State.—Clarence Chaffee remains unheard from. Our guess is that he is catching up on all the *Saturday Evening Post* stories he did not have time to read in Electrochem. Lab.—Del Prado is now mining gold on his Philippine estate. Tatman is working around the Youngstown district, but his exact location is unknown.

"Yours Truly is still at Peru, not South America, and hopes to be in Cambridge for the Reunion."

The details about Ray Meade seem to come to light via the Boston papers to the effect that "Mr. and Mrs. John J. Buckley of Cambridge have announced the engagement of their daughter, Lillian Gertrude, to Ray Meade, son of Mrs. Mary E. Meade of Ensley, Ala. Miss Buckley is a graduate of Cambridge Latin School and attended the New England Conservatory of Music. Mr. Meade is a graduate of Alabama Polytechnic Institute and Massachusetts Institute of Technology, Class of 1924." He himself reports that he has received a considerable boost in position and salary from the Semet-Solvay Company and has been transferred from the Detroit office to the Buffalo office.

Tatman says in a letter to someone at the Institute (Prof. Locke, I think) "I am now associated with The Rogers-Brown Iron Company, performing the duties of burden clerk and as an assistant to the general foreman."

Charles A. Frank, Jr., *Secretary*,
390 Commonwealth Avenue, Boston.
Charles R. MacBrayne, *Assistant Secretary*,
745 Ninth Street, La Salle, Ill.

Course VI

Vin Lysaght and Lester Twitchell are with the Testing Department of the New York Edison Company. Their work is chiefly the testing of new apparatus before it is installed, and so on. They did do a little teaching in the evenings during the fall, but they say that is all past now.

Frank Hecht recently accepted a position in the Engineering Department of the Brooklyn Edison Company. Leland Franke until about a month ago was with Twitchell and Lysaght in the

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1924 Continued

Testing Department of the New York Edison Company. Now he is carrying on a production test for the N. E. L. A. in Framingham, Mass. Jack Parsons is doing the same work for the N. E. L. A. at Bridgeport, Conn. Matt Nash will soon be located at Poughkeepsie, N. Y., but just what he is doing has not yet been determined.—I had a letter from Clinton Conway, also. He is an Illuminating Engineer for the Consolidated Gas, Electric Light and Power Company of Baltimore and writes that he is quite in it "brightening up the world." He handles the bulk of the residence lighting work there.—D. E. Morrisy, II, who is a cadet engineer in the Hudson Electric Distribution Department of the Public Service Electric and Gas Company, N. J., has been granted a six-month leave of absence to return to his home in New Orleans, La., on account of the illness of his parents.

Hazen, in coöperation with Speers, presented a paper before the National Convention of the A. I. E. E. The General Electric Student Engineers' Course has a number of '24 men in it among whom are W. T. (Doc) Cook, J. E. Jackson, L. S. (Stretch) Johnson, Raymond Johnson, Robert Morton (who has left for his home in St. Louis), Harold Shippen, J. J. (Jerry) Taylor, W. R. Weeks, Wills, Y. H. Woo, and R. H. Rhea. Jackson, L. S. Johnson, Cook, Weeks and Hazen are living together and are having some great times in the country surrounding Schenectady during the weekends.

Doc Cook and Dick Harrington, '18, writers of Tech Shows in '24 and '18 respectively, were responsible for the M. I. T. part of "Collegiate Night," broadcast on January 31 by WGY, which no doubt some of the members of '24 heard, and which, judging by the comments of various listeners-in, went over big.

The test men get the opportunity to test nearly all the electrical apparatus manufactured by the G. E. Company, work which is on the whole, interesting and instructive. Hazen is at Pittsfield for thirteen weeks on transformers from 100 K. V. A. up, where he gives them the usual tests. His present address is the Y. M. C. A., Pittsfield, Mass.

From the *Boston Herald*: "The engagement of Miss Bertha Jordan Sweetland is announced to Mr. Clinton M. Haig. Miss Sweetland is the daughter of Mrs. Agnes Sweetland. Her fiancé, who comes from Starkweather, N. D., graduated with the Class of 1924 of the Massachusetts Institute of Technology."

From the *Boston Transcript*: "Announcement is made by Mrs. Mary Lorimer, of Alhambra, Calif., and of Sagamore Street, Atlantic, of the engagement of her daughter, Miss Sadie Lorimer, to Samuel J. Hatfield, son of Mr. and Mrs. John V. N. Hatfield of 80 Pleasant Street, Arlington. Miss Lorimer is prominent in Girl Scout work in Atlantic, where she belongs also to the Service Club. Mr. Hatfield is a graduate of the Massachusetts Institute of Technology, Class of 1924. No date has been set for the wedding."

Helen W. Hardy, Secretary,
80 Park Place, Newark, N. J.

Course X

Cliff Bailey made a pilgrimage to the Holy City for his birthday. Jack Parsons came down from Bridgeport for the occasion. Frank Hecht, V, and myself made up the party. We saw all we could at the "Follies" and sipped all we could elsewhere. Cliff was feeling great because he had just found a new way of analyzing a certain dye. Bailey is still down in Wilmington with the du Ponts.

During the month I sent out eight letters and Dave Schoenfeld is the only one to answer. He has finished work in the Practice School and is back at the 'Stute. Like all the rest of the X-A gang, he says the work out in the plants was mighty interesting. Dave went over to the 1924 Reunion at Walker and found quite a few of the old gang there.

It is about time for the \$8.88 and I hope nobody misses it any more than they do the four summer months of vacation we used to get. If you get a vacation at all this summer I would like to hear all about it.

From the *Baltimore American* (other accounts appeared in Boston papers but this was the best of all): "She had a chance to be a countess with estates and castles in France, but she chose to become a Baltimore matron and mistress of a little bungalow on a hill in Brooklyn, Md. She spurned the advances of Count Alphonse D'Ornano, said to be a direct descendant of Emperor Napoleon III, possessor of hereditary lands and manors in the land of his ancestors, and five times decorated for bravery upon the field of battle. Instead she became Mrs. George R. Taylor, wife of a chemical engineer, employed in the Baltimore plant of the United States Chemical Company.

"The heroine of the romance in which the titled foreigner lost out to the American was Miss Virginia Dodge, 1924 graduate of Radcliffe, daughter of Dr. Irving Perry Dodge, wealthy President of the Commonwealth Hospital of Boston. The hero, Mr. Taylor, was graduated last summer from the Massachusetts Institute of Technology, and has only begun the career which may lead to the Hall of Fame."

And so on until this: "The next episode took place at St. Luke's Church in New York. The bridegroom wasn't a Harvard man, but

Quality

ONE fine morning, in Bedtime Story Land, Mrs. Lion and Mrs. Rabbit were talking about their children. Mrs. Rabbit was inclined to be boastful. "I have forty-two of the little darlings, now," said she. "No; now that I come to think of it I have forty-eight. It is very hard to keep track of them all."

Mrs. Lion was silent for some moments, gazing reflectively at her sturdy, lemon-colored son who slept peacefully under the low archway of the Lion domicile. "I have only one child," said Mrs. Lion, "but that one is a lion." After which a heavy silence fell over Bedtime Story Land and presently Mrs. Rabbit collected her children, counted them and marched them home. It is very hard to get enthusiastic over other people's children.

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1924 Continued

he was an American. He had just received his diploma in chemical engineering at the Massachusetts Institute of Technology. The pastor was the Rev. Dr. Taylor, not related to the groom." The only thing this article omitted to do was to play up the fact that besides having the distinction of being a member of the Class of 1924 from Tech, the groom was also a direct descendant of Zachary Taylor, eleventh President of the United States.

From the *New York Bulletin* and copied by the Charleston, W. Va., *Gazette*: "At a luncheon given at the Morgantown Country Club, announcement was made of the engagement of Miss Helen Burke, of this city (Morgantown) and C. Edwin Miller of Beallsville, Pa. Mrs. William E. Glasscock, Jr., a sorority sister of Miss Burke, was the hostess. Miss Burke, who is one of the members of the South Park Society set, was graduated from the Morgantown High School and received her A.B. degree from the University with the Class of 1922. She also spent one year at Goucher College in Baltimore. Miss Burke is a member of Theta Chapter of Chi Omega Sorority, and other campus organizations. She is a daughter of Mr. and Mrs. T. Frank Burke, of 116 Maple Avenue. Mr. Miller, who is a son of Mr. and Mrs. J. P. Miller of Beallsville, Pa., was graduated from Washington and Jefferson College with the Class of '20. He is a member of Gamma Chapter of Beta Theta Pi Fraternity. After receiving his Bachelor of Arts degree, Mr. Miller entered Massachusetts Institute of Technology from which he received a Master's Degree in chemical engineering in 1924. At this time he is connected with the research department of the du Pont Fibre Silk Company at Buffalo, N. Y. The wedding will be an event of the spring season."

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Course XV

Well, fellows, it's about time that we heard something about the best course in the best Class that was ever graduated from the 'Stute, so hearken while we try to give you the dope on some of our illustrious fellow-sufferers. Most of us are pretty well located, and that, in spite of the fact that we were graduated when the world was at its coldest.

Blay Atherton, who married Miss Katherine Bremner of Brookline in September, is at the 'Stute assisting Professor Shugrue. Professor Shugrue has been very ill but is on the road to recovery.—Phil Blanchard is building locomotives with the American Locomotive Company at Schenectady.—Carl Bartow is with the Underwriters' Laboratories at 40 Central Street, Boston.—Rock Hereford rocked overland in his flivver last summer and is at present with the Southern California Edison Company at Camp 63, Big Creek, Calif. Let's hear from you, Rock!—Nish Cornish and Web Brockelman are at Longview, Wash., with the Long-Bell Lumber Company.—Duke Marrs is at the Dennison Plant in Framingham.—I had a letter from Dusty Rhodes not so long ago. He is a bloated bond-broker, helping Halsey, Stuart and Company, (Wall Street, New York City) with some of their more important problems.—Gib Cowan and Al Liff are both in department store work in New York City, Gib with Lord and Taylor and Al with the R. H. Macy Company.—Mac MacPherson is with the Giblin Company, Park Square Building, Boston.—Those famous twins, Jim Peirce and Charlie Phelps are in Philadelphia. Charlie is with the Atwater-Kent people and whether or not Jim has sufficiently recovered from his summer in Europe and has a job, we don't know.

Rumor has it that Dave Meeker and George Parker are no longer free to go out with the boys, but we have heard nothing definite. Dave may be reached at the General Motors Research Corporation at Dayton, Ohio, and George at the Ersted Machine Manufacturing Company, Portland, Ore.—Dean Plant and Dick Southgate are reading gas meters for the Public Service Corporation of New Jersey, with headquarters at Newark, N. J.—Dave Lasser is also in Newark as a staff engineer with the Rosendale-Reddaway Company.—Ed Dunlaevy dropped in one day last fall; he is starting at the bottom with the Brooklyn Sewer Department, and may be reached at Montague Avenue, Brooklyn, N. Y.—Bill Rowe and Gee Wheeler are at the Standard Plate Glass Company, 50 Sudbury Street, Boston. Accounts are that they are evolving the perfect unbreakable plate-glass bottle.—Wink Quarles is with the Ingersoll-Rand Company, Phillipsburg, N. J., and may be reached at the Y. M. C. A. at Easton, Pa.—Jack Parsons is doing radio work with the General Electric at Schenectady, and lives at 24 Glenwood Blvd., Schenectady. Bill Rosenwald and Ray Lehrer decided to see how the other half lives, so are out at Harvard.—John McPhee is in Denver, living at 1859 York Street of that city. Bill Van Dusen is in New York with the National Credit Office at 45 East 17th Street.—Johnny Grabfield, after a summer spent in the Cadillac shops here, is with that company in Detroit. His address is 600 Pingree Street, Detroit.—Jack Lehman is with the Firestone Tire and Rubber Company at their Boston office, 656 Beacon Street, Boston.

Perhaps this rambling account will serve to ease the minds of some of you who were worrying about the fate of your classmates once they had left the sheltering walls of the 'Stute. Your Secretary is here assisting Professor Schell, and would be mighty glad to hear from you at any time. Professor Schell is still with us, although he has made arrangements to go to Harvard for good next year. Professor Freeland and Miss Barnard are on the job and send regards to all Course XV men, as do the other members of the Department.

Paul Cardinal encloses this in a letter which he wrote to the General Secretary complaining about the statements made concerning him in the March issue. But he admits, himself, that the complaints were only an excuse to send this news along. I would like to correct one very gross mistake however. Paul is a member of Course XV not of Course X.

"While in Detroit last October for the firm, I ran up against H. M. Benning looking for a job among the flivver kings. I happened in on a dinner of the Detroit Alumni and they made my stay there very warm and interesting.

"R. N. Black held me up in New York about a month ago to tell me he was working with the New York Telephone Company in

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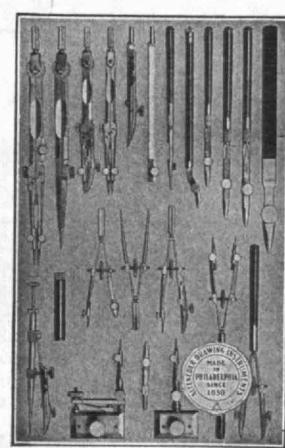
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1924 Continued

the Commercial Engineering Department. Way back last fall G. Y. Billard hailed me on lower Broadway and said he was with the H. L. Doherty Company. (I'm not sure of those initials) and had just laid out an office for them. They handle bonds, and so on. Only two weeks ago A. W. Rhodes slapped me on the back in the Erie Station over in Jersey City and told me he'd have lunch with me soon."—Paul is with the Hoffmann-La Roche Chemical Works as advertising manager and on the side does a little writing.

And from the *Boston Transcript*: "Mr. and Mr. William H. McNally of Somerville announce the engagement of their daughter

Mary Magdalene to Joseph Michael Naughton, son of Mr. and Mrs. M. W. Naughton of Rochester, N. Y. Mr. Naughton, who was graduated from the Massachusetts Institute of Technology with the Class of 1924, is at present residing in Indianapolis." May we take this occasion to congratulate you on behalf of the Class, Joe?

Send in the hot dope, men, don't forget the Reunion, and if you know of anyone who is so misguided as not to have joined the Alumni Association, sit on him until he promises to better his ways.

John O. Holden, *Secretary*,
Room 1-181, M. I. T., Cambridge, Mass.

The Massachusetts Institute of Technology CAMBRIDGE, MASS.

The Massachusetts Institute of Technology offers Courses, each of four years' duration, in Civil, Mechanical and Electrical Engineering; Naval Architecture and Marine Engineering; Mining Engineering and Metallurgy and Geology and Geological Engineering; Architecture and Architectural Engineering; Chemistry, Chemical Engineering and Electrochemical Engineering; Biology and Public Health, Sanitary and Municipal Engineering; Physics, General Science and General Engineering; and in Engineering Administration. These Courses lead to the degree of Bachelor of Science.

To be admitted to the first year class, applicants must have attained the age of seventeen years, and must satisfactorily fulfill entrance requirements in Algebra, Plane and Solid Geometry, Trigonometry, Physics, Chemistry, English, History, and French or German and one elective subject. Examinations are required in all subjects except Chemistry, History and the elective, the requirements for which are fulfilled by the presentation of satisfactory certificates. A division of these entrance subjects between different examination periods is permitted.

Entrance examinations are held at the Institute in September. In June, applicants will be examined by the College Entrance Examination Board in Boston, New York, Philadelphia, Chicago and many other cities in America and Europe. A circular stating times and places is issued in advance by the College Board.

Graduates of colleges and scientific schools of collegiate grade, and in general all applicants presenting satisfactory certificates showing work done at another college corresponding to at least one year's work at the Institute, are admitted, without examination, to such advanced standing as is warranted by their previous training.

Graduate courses leading to the degrees of Master of Science, Master in Architecture, Doctor of Philosophy and Doctor of Science are also offered. Special research Laboratories of Physical Chemistry, Applied Chemistry and Science have been established.

PUBLICATIONS

The Institute publishes a number of bulletins designed to acquaint prospective students and others who may be interested with its requirements, facilities, instructional aims and subjects. These will be mailed gratis and post free upon request.

For general information, requirements for admission, brief description of courses, etc., ask for *Bulletin A*.

For schedules of courses and detailed description of subjects of instruction, ask for *Bulletin B*.

For the announcement of courses offered in the Summer Session, ask for *Bulletin C*.

For information on Advanced Study and Research, ask for *Bulletin D*.

For the report of the President and the Treasurer, ask for *Bulletin E*.

For a popularly written explanation of Engineering Course content, ask for *Bulletin Y*.

For these bulletins, or for any other information, address

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